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Pensions & Investment Age

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The newspaper of corporate and institutional investing • $4.00 an issue • $80 a year • November 2, 1987

# The aftermath

## Investors see buys, lessons

October's market crash, although spectacular and painful, was a positive development, many institutional investors contend.

They view it as a timely, modestly expensive, but not fatal, warning, like a spinout on a slippery road: If the drivers heed the warning, a more serious crash can be avoided. Many investors have reacted to the warning, not by pulling onto the shoulder of the road and stopping, but by moving cautiously to resume normal activity.

This was reinforced Oct. 29, when institutional investors returned to the market in force, pushing the Dow Jones industrial average up 91.51 points.

Although the crash is estimated to have cost investors more than $500 billion, and pension funds about $200 billion, most investors saw positive aspects a week after the disaster:

- The White House and Congress are talking to each other about meaningful reductions in the budget deficit.
- The psychological impact of the crash may cause consumers to reduce their spending plans, and especially to stop living beyond their means by piling up increasing amounts of debt.
- Stock prices and price-earnings ratios are at what many regard as more realistic levels than they were at the beginning of October, presenting buying opportunities.
- Interest rates, which had risen sharply through the beginning of October, have fallen again as the Federal Reserve Board injected reserves to provide whatever liquidity the financial community needed.
- The decline in interest rates has provided corporations a financing window in which to renegotiate higher interest debt or replace planned but abandoned equity financing with debt financing.
- The crash is forcing exchanges, particularly the futures exchanges, to examine the impact of portfolio insurance and program trading, and to consider rules to limit such activities to dampen the extreme volatility the markets experienced.

### The causes

Two weeks after the crash, institutional investors were in general agreement as to why it occurred and what triggered it.

The causes were stock prices running far ahead of fundamentals leading to the common expectation of a correction; rising interest rates; concern over the federal budget and trade deficits; and a slump in foreign buying support for U.S. securities because of the declining dollar.

The triggers were Treasury Secretary James Baker III's verbal brush with the West German government; poorer-than-expected trade deficit figures; and a House Ways and

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# Financing window still open

By Marcia Parker

Urged on by Wall Street's corporate finance gurus, chief financial officers and treasurers are scouting for — and finding — windows of opportunity to raise money despite the stock market's wild gyrations.

"There are financing opportunities," said James Crowley, co-head of investment banking, Prudential-Bache Capital Funding, New York. "You just have to find them."

The advice given by investment bankers to corporate clients is to carefully assess financing needs to year end and see if it makes sense to try any of the current financing options, especially medium-term financing.

"Look hard at your financing needs. Make sure you are prudently financed and your sources of capital are secure. And if you have an enormous reliance on floating-rate debt or financing you've been delaying, this is a good time to lock in financing," said Thomas K. McCaughey, managing director-capital markets services group, Salomon Brothers Inc., New York.

Ron Starkman, vice president-corporate finance, American Express Corp., New York, agrees opportunities exist, but "it's also hard to capitalize on them. You have to compress your decision making to a very tight time frame."

For corporate treasurers, the challenge of deciding whether to finance now or later depends on their outlook for the economy in general and interest rates in particular.

Interviews with corporate treasurers and finance executives found them evenly divided. Half, believing interest rates will rise again, are financing now while rates are depressed. The others, betting rates will fall further, are holding off on any financing.

At the moment, the financing windows are confined mainly to the U.S. public debt and the private placement markets, with little appetite among foreign investors.

Cash offerings in the equity market all but dried up since the unprecedented 508-point drop in the Dow Jones industrial average Oct. 19.

And the consensus on Wall Street is that equity offerings probably won't pick up before year end or perhaps early next year, assuming market confidence is restored.

"It's very hard to get equity deals priced and done," Mr. Crowley said. "It will come back, but it will take time."

Salomon Brothers is slightly more optimistic about a revival of the equity market than many of its counterparts. Salomon's latest credit market monitor said the upcoming equity calendar suggests renewed activity, though issuance is more likely to remain light until the market calms.

Mr. McCaughey said many Salomon customers have equity deals on the drawing board. "Stay tuned. We should be back in business in a few weeks," he added.

Although the equity markets are temporarily languishing, the debt market is thriving. Interest rates in the corporate bond market have fallen significantly, which has spurred a rash of high-quality companies to float new issues.

Companies are using the money for various purposes, including general corporate spending, to buy back stock, and to pay off more expensive debt.

The domestic corporate bond market benefited from the stock market's decline. Issuance for the week after the market collapsed totaled $3.7 billion, the highest volume in eight months, according to Salomon Brothers. Gross offerings were relatively strong across most sectors, with sales finance companies the most active. Sales finance companies include consumer finance firms, insurance companies and brokerages. Salomon expected $4 billion to $5 billion by the end of last week.

Investment bankers say issuance should remain strong in the weeks ahead as suppliers, who remained on the sidelines when interest rates rose in August and September, take advantage of the lower interest rate environment.

"This has resulted in a fresh look at financing on the debt side," Mr. McCaughey said.

Several options are available in the U.S. public debt market, especially to the strongest investment-grade companies, investment bankers say. Many of the debt financings done by companies since the market crashed consist of shorter-term maturities. Only a few issues stretch beyond 10 years.

*Continued on page 53*

## Buybacks cause for concern

By Brad Rudin

Announcements of stock buybacks totaling more than $15 billion helped stabilize the frenzied stock market, but could cause headaches for some companies in the future.

The proposed buybacks, only some of which have been carried out, bolstered confidence, market analysts agree, but have raised concerns about the wisdom of diverting cash from debt service payments and capital expenditures.

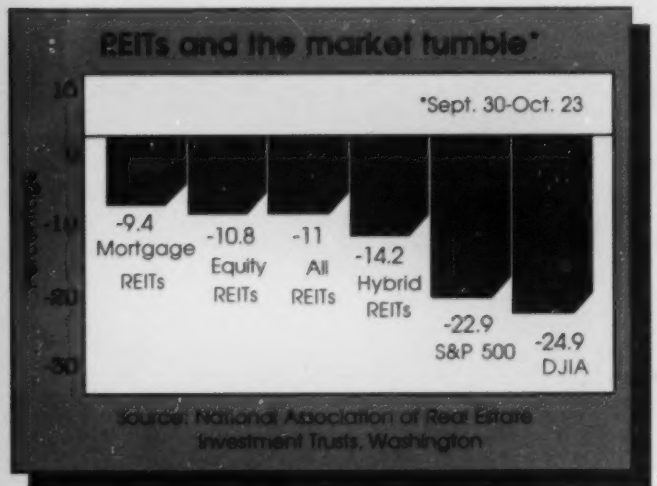
And to the extent that some companies borrowed to finance the repurchases, they may have added leverage to an already leveraged balance sheet.

*Continued on page 45*

### A sampling of recent buyback announcements*

| Company | Maximum shares to be repurchased | # of shares outstanding |
|---|---|---|
| AMAX | 3 million | 98,160,000 |
| Beneficial | 1 million | 23,000,000 |
| Consolidated Freightways | 2 million | 38,500,000 |
| Dow Chemical | 2 million | 192,000,000 |
| Dunkin' Donuts | 500,000 | 6,860,607 |
| General Host | 1 million | 22,500,000 |
| Gibson Greetings | 1.8 million | 15,700,000 |
| Hilton Hotels | 3.9 million | 24,964,787 |
| Honeywell | 5 million | 44,000,000 |
| Nat'l Distillers & Chemical | 6 million | 32,800,000 |
| NCR | 10 million | 91,899,079 |
| NWA | 1 million | 30,000,000 |
| Pacific Telesis | 10 million | 432,100,000 |
| PepsiCo | 15 million | 260,000,000 |
| Phelps Dodge | 3 million | 30,800,000 |
| Procter & Gamble | 10 million | 169,196,524 |
| Temple-Inland | 2 million | 29,780,531 |
| Union Carbide | 10 million | 131,613,863 |
| Vista Chemical | 500,000 | 16,000,000 |
| Zayre | 5 million | 56,700,000 |

* Several buyback announcements were extensions of previously announced repurchase plans




# REITs miss market drop

By Nancy K. Webman

Real estate investment trusts escaped relatively unscathed from the gyrations that jolted the stock market.

REITs, on average, declined in value 11% between Oct. 1 and Oct. 23, compared with 24.9% for the Dow Jones industrial average and 22.9% for the Standard & Poor's 500 stock index, according to Chris Lucas, research director for the National Association of Real Estate Investment Trusts, Washington.

NAREIT's Share Price Index of 96 tax-qualified REITs trading on the three major exchanges also showed mortgage REITs fared best, losing 9.4% of their value. Hybrid REITs posted a 14.2% drop. Equity REITs dipped 10.8%.

Mr. Lucas couldn't explain why hybrid REITs suffered the most. But one real estate analyst, who asked not to be named, speculated most hybrids are health-care REITs,

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# Catch-22 for realty

By Joanne Friedrick and Nancy K. Webman

The stock market's tumble caught real estate in a Catch-22: Institutional investors are more inclined to bet on real estate, but they'll have fewer dollars to ante up.

No doubt real estate, whose returns had been tarnished by abysmal appreciation in an overbuilt market, has taken on a new luster among pension investors looking for safer harbors and diversification for the assets they pocketed when they dumped their stocks.

But pension funds have a target allocation to real estate — a percentage of total assets — and a fund that lost money in the stock market now has fewer assets. As a result, the proportion of real estate assets in the portfolio could have risen to the target level, making it difficult for a fund to commit more to real estate.

American Telephone & Telegraph Co., New York, one of the biggest pension fund players in real estate, could face just such a dilemma.

Ronald R. Roessler, director-investment management at the $26 billion AT&T fund, said AT&T's $2.4 billion in real estate is comfortably within its target range of 10% to 15% of total assets. Yet he cautioned: "If the stock market were to continue to drop, we would find ourselves on the upper end of the range and, while we wouldn't sell anything, we might have to pull back."

Even smaller funds could see allocations exceed targets, and the funds will stop investing, said Brian K. Walters, vice president of CM Asset Advisors, the consulting subsidiary of Connecticut Mutual Life Insurance Co., Hartford.

Many funds, however, had been well below their targets, and pension executives and trustees were hesitant to choose a bearish real estate market over a bullish stock market. But that could change.

"If this is a market scare, clearly it will be good for real estate and will focus on the need to diversify," said Stanislaw Maliszewski, principal in the Chicago office of RREEF, a San Francisco-based real estate investment

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Vol. 15, No. 23 — Pensions & Investment Age (ISSN 0273-5466) is published every other Monday at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1987.

# Cash Management

# Banking duties rank No. 1

By Barry B. Burr

Treasury executives responsible for cash management spend more time on float management and other non-lending banking relations, even though broader corporate finance activities are considered more important for promotion, according to a *Pensions & Investment Age* survey.

In the survey, executives ranked the amount of time they spend performing various treasury management functions and which of those functions leads to promotion.

The results show they spend less time in those functions considered most important for promotion.

The findings were compiled from 128 responses to questionnaires on corporate cash management practices and attitudes, mailed to 500 domestic cash and treasury management executives at 500 large corporations.

Among other results, the survey found:

- Corporate mergers and acquisitions have had little effect on cash management professional staffs at most companies.

In fact, of the responding companies affected by mergers and acquisitions, the survey found almost as many of the companies increasing professional staff as decreasing it.

- Financial troubles at banks caused nearly half of the responding companies to either drop or reduce the use of them for cash management services.

On treasury functions, the survey found more than 50% of the respondents ranked broader corporate finance activities as the most important treasury management function leading to promotion.

Yet they devote, on average, nearly 22% of their time in float management, selecting collection and disbursement banks and dealing with other non-lending banking relations.

Of the 11 cash management functions listed on the questionnaire, the respondents noted they spend nearly 20% of their time in broader corporate finance activities. Although it amounts to a plurality of their time on average, the results are skewed by a few respondents. Individually, more than half the respondents — nearly 55% — spend less than 20% of their time in broader corporate finance, most of them less than 10%.

In the survey, the executives indicate that, to get ahead, they have to spend more time in corporate financing activities.

Other areas of cash management covered by the survey include borrowing, investing, electronic funds transfer and the impact of mergers in the banking industry.

In addition, *P&I Age* surveyed the executives on matters relating to the National Corporate Cash Management Association. The concerns included the NCCMA's certification examination. (*See related story.*)

The survey also found:

- Little consensus exists on the use of benchmarks for measuring the performance of their corporate cash investment portfolios.
- Bank mergers have had little effect on cash management services provided to corporations, according to the survey.
- Most treasury executives are making no change in their strategy to boost investment returns.
- Further moves by companies are under way to pay charges for banking services in cash, known as fees, instead of by depositing compensating balances.
- Most corporate treasury departments play a leading or supportive part in developing electronic funds transfer programs to pay vendors. Of the respondents, 43% have a leading role; 34%, supportive; 10%, peripheral; 11%, hardly any; and 2%, none.

Of the respondents, one was vice president-corporate finance; eight, treasurers; 25, assistant treasurers; 21, cash managers; 11, managers of banking, or of banking, investment and finance; 17, managers of treasury operations or services; and, 11 managers, directors or supervisors of cash management or cash operations. Also included were director-finance, manager-planning and funding, or treasury analyst.

Cash management is tending to become more important at companies, the survey found.

A third of the respondents said cash management was viewed by their companies as more important this year than last; 5%, as less important; and 62%, about the same.

The amount of time the respondents spend in the treasury management functions listed in the questionnaire varied widely. After corporate finance, the category with the highest average percentage was "other," including dealing with other departments such as accounting, foreign exchange trading, cash flow forecasting, developing treasury systems and shareholder relations.

The survey found mergers and acquisitions since last year have had no effect on cash management professionals at 81% of the companies involved in the survey. At the 19% companies where it had an impact, slightly more than half of the respondents noted it resulted in a 41% decrease on average in cash management professionals.

But respondents at almost half of the affected companies noted mergers and acquisitions resulted in an increase of professional staff by an average 49%.

Financial trouble in the banking industry is causing cash management executives to review their banks' fiscal soundness more

*Continued on page 21*

**1. How have bank mergers affected your cash management services?**

| | |
|---|---|
| improved service | 9% |
| service declined, but bank retained | 12% |
| no change | 76% |
| changed banks | 3% |

**2. What percentage of your banks' charges do you pay in:**

| | |
|---|---|
| compensating balances | 46% |
| cash fees | 54% |

**What is your goal for 1988:**

| | |
|---|---|
| compensating balances | 39% |
| cash fees | 61% |

**3. Have you hedged any of your borrowings to protect against potentially rising interest rates?**

| | |
|---|---|
| do so now | 24% |
| considering | 21% |
| ended this year | 3% |
| ended before 1987 | 4% |
| never did so | 48% |

**4. To boost investment returns in a low interest rate climate, are you:**

| | |
|---|---|
| taking on more risk | 4% |
| investing in new instruments, strategies | 29% |
| hiring outside managers | 4% |
| not changing strategy | 63% |

**5. What role does the treasury department play in developing an EFT program to pay vendors?**

| | |
|---|---|
| leading | 42% |
| supportive | 34% |
| peripheral | 10% |
| hardly any | 12% |
| none | 2% |

## NCCMA's projects OK with executives

Although a number have some reservations, corporate treasury executives generally are pleased with the major projects of the National Corporate Cash Management Association in professional certification, account analysis and lobbying banking regulators, according to a *Pensions & Investment Age* survey.

The survey found little interest by corporate executives in asking their banks to use the new banking account analysis standard, developed by the NCCMA.

In addition, it found fewer people at fewer companies taking the NCCMA certified cash manager examination.

The findings were part of the survey taken from responses to questionnaires completed by corporate cash managers and other treasury executives on cash management practices and attitudes.

Some 25%, or 125 of the 500 executives at 500 large companies sent questionnaires, responded.

When asked how effective the NCCMA has been in lobbying regulatory authorities about corporate concerns, such as Federal Reserve Board officials on daylight overdrafts, 19% of the respondents believe the group has been very effective; 69%, somewhat effective; and 12% said it had no effect.

On the NCCMA certification exam, 58% of the respondents said their companies think the test is worthwhile, while 42% said their companies don't think it is worthwhile.

The survey found the number of people taking the NCCMA certified cash manager examination dropped this year from 1986, the first year it was offered.

The questionnaires asked how many people in each company took the exam and how many passed it. The survey didn't indicate if the respondents took the exam.

In 1986, 59 people at 40 companies took the exam; 48 peo-

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**Scudder, Stevens & Clark corporate cash matrix**

| | Yield: Sept. 30 | | Yield: 3 mos. ago | | Yield: 1 yr. ago | | Total return: Latest 3 mos. | | Total return: Latest 12 mos. | |
|---|---|---|---|---|---|---|---|---|---|---|
| **30-day** | | | | | | | | | | |
| Prime commercial paper/CD/BA* | 7.50 | 4.50 | 6.75 | 4.05 | 5.88 | 3.18 | 1.72 | 1.03 | 6.60 | 3.82 |
| Prime tax-exempt commercial paper | 9.08 | 5.45 | 7.00 | 4.20 | 7.04 | 3.80 | 1.78 | 1.07 | 7.25 | 4.23 |
| **49-day** | | | | | | | | | | |
| Auction-rate preferred stock (AAA-AA-A composite) | 8.94 | 5.36 | 7.66 | 4.60 | 7.56 | 4.08 | 1.97 | 1.18 | 7.66 | 4.47 |
| **90-day** | | | | | | | | | | |
| Treasury bill | 6.80 | 4.08 | 5.77 | 3.46 | 5.31 | 2.87 | 1.45 | 0.87 | 5.91 | 3.42 |
| Prime commercial paper | 7.60 | 4.56 | 6.93 | 4.16 | 5.83 | 3.15 | 1.64 | 0.98 | 6.24 | 3.62 |
| Prime tax-exempt commercial paper | 8.96 | 5.38 | 6.88 | 4.13 | 7.50 | 4.05 | 1.47 | 0.88 | 6.77 | 3.95 |
| **1-year** | | | | | | | | | | |
| Treasury bill | 7.76 | 4.66 | 6.67 | 4.00 | 5.77 | 3.12 | 0.58 | 0.35 | 4.20 | 2.43 |
| Prime municipal note | 9.33 | 5.60 | 7.17 | 4.30 | 8.33 | 4.50 | 0.00 | 0.00 | 3.64 | 3.07 |

The matrix is at a constant maturity, meaning all instruments are rolled over monthly. Income is taxed at 40% for 1987 and 46% for 1986; capital gains and loses are taxed at 34% for 1987 and 46% for 1986.
* CD is certificate of deposit; BA is banker's acceptance

pretax
after-tax

# Market upsets rates' stability

By Fred Williams

Following Wall Street's recent crash, corporate treasurers expressed fears over short-term interest rate stability as they watched cash pour into short-term instruments and cause wild, intraday swings.

Millions of dollars were taken out of the stock market during the Oct. 19 508-point drop in the Dow Jones industrial average and were moved into government bonds, Treasury bills and money market instruments in a "flight to quality."

The increased money supply forced interest rates lower, resulting in dramatic day-to-day swings in these instruments' rates. The swings were most pronounced in 30-day and 90-day Treasury bills, commercial paper and agency issues of short maturity, all bought and sold daily by cash managers borrowing or investing surplus cash positions.

The gyrations in the short-term market made it all but impossible to get a grasp on the short end of the market. Treasury officers and investment specialists look for rates to stabilize in the next few weeks.

"Treasurers are least affected (by the market collapse) in the management of short-term liquidity." A treasurer "is affected only

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# Banking . . .

*Continued from page 17*

systematically, the survey found. Of the respondents, 21% said they were reviewing their banks much more systematically; 52% said somewhat more; and 27% said there has been no change.

Along those lines, 37% of the respondents reported their companies either dropped services or reduced services at banks because of their financial troubles. Of those, 17% dropped services from troubled banks, 13% reduced services and 7% did both. In all, they dropped 165 services and reduced the use of 52 more.

The most frequently cited services dropped or reduced were lockbox, controlled disbursement, depository, borrowing, demand deposit accounts, cash concentration accounts and dividend payment accounts.

The survey found 32% of the respondents have or will hedge on average 30% of their borrowings, using futures, options or other protection.

The rest don't hedge their borrowings with protection instruments.

Few corporate treasury departments are satisfied with the benchmarks they use for measuring the performance of their corporate cash investment portfolios. In fact, 40% of the respondents said they don't have a benchmark.

Only 20% of the respondents are satisfied with their benchmarks; 34% said their benchmarks could be improved but aren't planning any changes; and 10% said they are planning to adopt better measures.

The most frequently used benchmarks are Treasury bills, cited by 10% of the respondents; commercial paper rate, 5%; the money market fund averages published by Donoghue Organization Inc., Holliston, Mass., 5%; federal fund rate, 5%; and other money market fund rates, 3%.

The survey found only 16% of the respondents employ or plan to employ by next year outside managers to invest corporate cash. On average, they use or plan to use about three or four managers each.

Few treasury executives use money brokers to invest in certificates of deposit or other instruments. Of them, 69% never use money brokers; 29% use them occasionally; 1% recently started; and 1% always use them.

Only 11% of the respondents offer or are planning to offer electronic direct deposit of corporate dividends to non-institutional shareholders.

Of the respondents not offering electronic dividend deposits, 36% said they never considered it; 24% said not enough shareholders are interested; 18% cited loss of float; 15% said it would be too costly; and 9% cited other reasons, mainly that their companies don't pay dividends. ■

*Carol Wiley, P&I Age directory coordinator, compiled the survey results.*

### Treasury functions

| | Leads to promotion (% of responses) | % of time spent on |
|---|---|---|
| Broader corporate finance | 50.5 | 19.7 |
| Other | 15.4 | 22.1 |
| Working capital management | 6.8 | 5.9 |
| Selecting lending banks | 5.1 | 4 |
| Other bank relations | 5.1 | 9 |
| Short-term borrowing | 5.1 | 8.6 |
| Investing corporate cash | 3.4 | 10.6 |
| Float management | 2.6 | 7.6 |
| Selecting collection/ disbursement banks | 2.6 | 5.3 |
| EFT/EDI development | 1.7 | 4.8 |
| Pension investments | 1.7 | 2.4 |

### Bank services more competitively priced
(ranked by % of responses)

| | |
|---|---|
| Disbursements | 23 |
| Lockbox/check clearing | 18 |
| None | 11 |
| ACH/EDI | 10 |
| Wire transfers | 5 |
| Account maintenance | 3 |
| All | 3 |
| Credit services | 2 |
| Item deposits | 2 |
| Demand deposit accounts | 1.5 |
| International services | 1.5 |

### Services for which banks raised prices
(ranked by % of responses)

| | |
|---|---|
| Lockbox/check clearing | 27 |
| Wire transfers | 15 |
| All | 13 |
| Balance reporting | 9 |
| Account maintenance | 7 |
| Controlled disbursement | 5 |
| Item deposits | 5 |
| Letters of credit | 3 |
| Safekeeping | 3 |
| ACH | 2 |
| Demand deposit accounts | 2 |

### Benchmarks used to evaluate investment staff/managers
(ranked by % of responses)

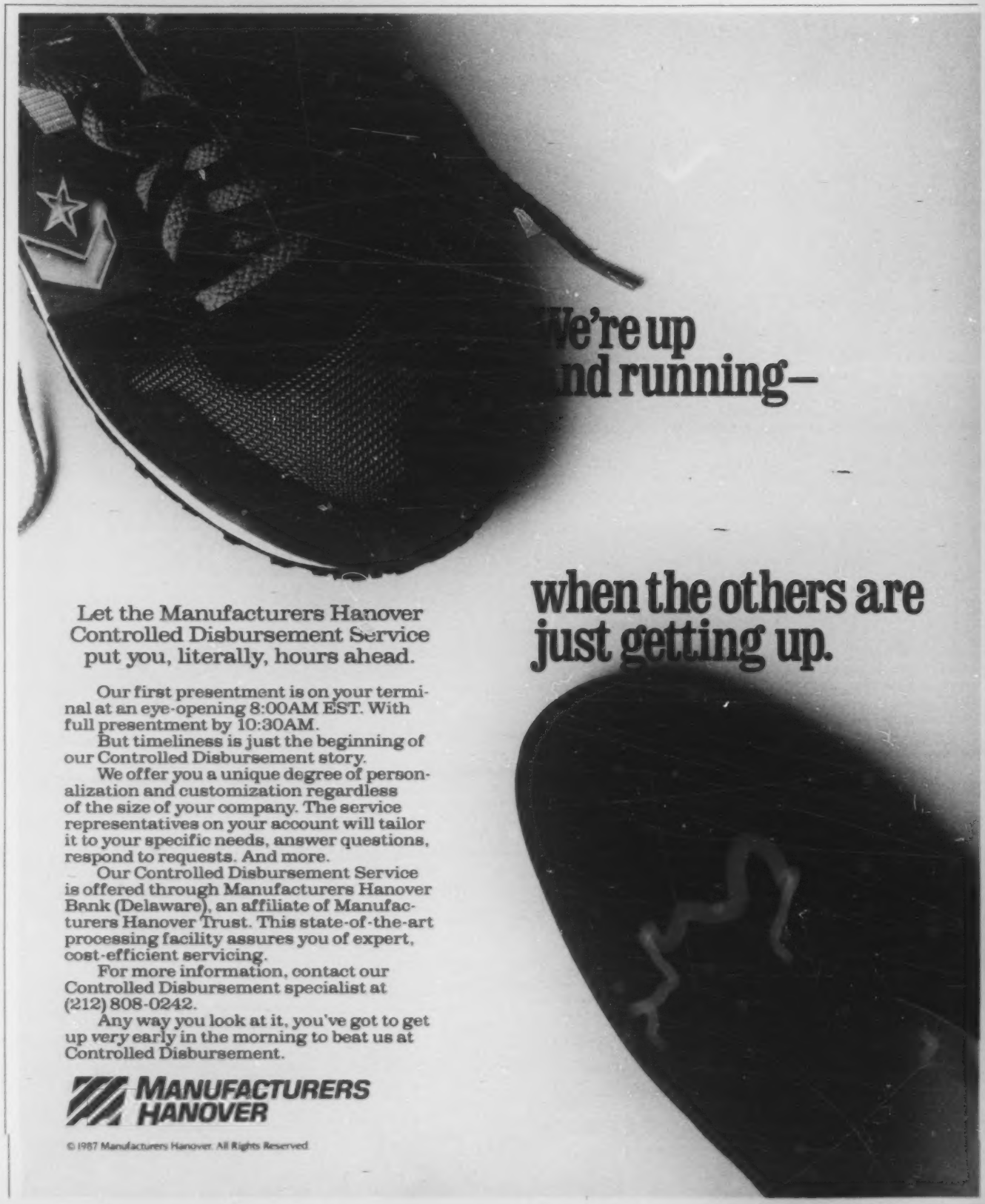
| | |
|---|---|
| Treasury bills | 10 |
| Commercial paper rate | 5 |
| Donoghue averages | 5 |
| Federal funds rate | 5 |
| Money market fund rates | 3 |

## *Midsize firm will get hit at tax time*

Midsize firms with annual sales between $1 million and $250 million will pay an average of 22% more in taxes in 1987 as a result of the Tax Reform Act of 1986, according to a study prepared by The CIT Group, an asset-based financing company in Livingston, N.J., and Peat Marwick, New York.

The CIT-Peat Marwick study showed heavy-construction contractors and real estate firms as well as businesses in agriculture, forestry and fishing face the greatest percentage increases in tax liabilities.

Tax cuts are expected in the securities and commodities services area while smaller increases are likely for chemical manufacturers and insurance agents/brokers. ■

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# Buybacks . . .

*Continued from page 2*

"The buybacks were something that contributed to a more positive tone," said Abby Joseph Cohen, investment policy analyst at Drexel Burnham Lambert Inc., New York. But there's no direct relationship between buybacks and individual companies' stock prices, she added.

More than 300 companies announced stock buyback plans after the market crashed Oct. 19. An announcement alone could prop up a company's stock price, while purchase of shares would result in lower dividend payments and higher earnings per share. Because a buyback has the potential to lift a company's stock price, the move is seen as an anti-takeover strategy.

Typically, statements announcing buyback plans have stressed the company's faith in its own stock. For example, when Procter & Gamble Co. announced it would repurchase up to 10 million of the company's 169,196,524 shares, Chairman John G. Smale said: "We are taking this action because the price of our stock in the past week has, at times, represented an excellent buying opportunity and we want to be prepared for such opportunities if and when they arise in the future."

Several market experts wondered about the number of shares that actually would be bought back after the announcements.

The announcements enable companies to perhaps enhance shareholder value without the cash outlays needed for dividends or acquisitions.

"What we don't know and can't quantify is how much was actually executed vs. just indicated," said Eric T. Miller, chief investment officer at Donaldson, Lufkin & Jenrette Securities Corp., New York.

Others raised concerns about companies that actually do carry out the buybacks.

"How come they're not raising dividends?" asked A. Marshall Acuff Jr., portfolio strategist at Smith Barney, Harris Upham & Co., New York. Dividends would have a greater impact on shareholder confidence than the buyback announcements, he said.

"They are looking for quick fixes," Mr. Acuff said. "Management says that Wall Street is short term but what we're seeing here is that managements by their actions are acting in the short term."

An Oct. 25 report by PaineWebber Inc. gave a more optimistic assessment. Repurchase announcements "went a long way to reversing Monday's collapse," the report said.

PaineWebber based its upbeat prediction on a comparison between the volume of stock that could be sold in portfolio insurance programs and the amount corporations could repurchase. Corporations have about $70 billion to spend on stock buybacks, while PaineWebber estimates $50 billion to $60 billion is in equity portfolios protected by portfolio insurance. Somewhat less than half of the shares in insured portfolios remain unsold, according to PaineWebber.

"It would seem that the buying potential of corporate America substantially exceeds the selling potential of portfolio insurance," the PaineWebber report said.

Money managers also are scrutinizing the list of more than 200 stock buybacks.

"We're looking for somebody who is enhancing shareholder value," said Orie L. Dudley Jr., chairman and chief executive officer of Fort Hill Investors Management Corp., a subsidiary of Merchants Capital Corp., Boston.

While offering a generally positive view of the recent spate of stock buybacks, Mr. Dudley said the announcements raise questions. "Is the management compromising financial position or growth and competitive position? That's the question we're asking ourselves."

The large number of companies that announced buybacks after the crash creates grounds for concern, said Kenneth S. Hackel, president of Systematic Financial Management Inc., Fort Lee, N.J.

"I would have thought they would have waited for the air to clear so they could determine what the fallout means for their business," he said. "Why would you want to spend cash now if you need it in the next couple of quarters?"

An economic downturn would drain the benefit expected from stock buybacks, Mr. Hackel said. "If, in fact, this turns into a very serious recession, many of these companies will have made a serious error in judgment." Even a mild recession would hurt leveraged companies that used internally generated cash or credit capacity to pay for a stock buyback, he said.

"Companies having financial flexibility are able to undertake capital projects which companies without such flexibility cannot," he said.

Buybacks make sense for companies with stable cash flows, strong balance sheets and solid operating histories, Mr. Hackel said.

The rating agencies, never enthusiastic about reductions in equity, offered a measured response to the wave of announcements.

Many companies are borrowing from banks and insurance companies to finance the stock repurchases. "Our program to make two- to three-year loans to companies for stock buybacks has been warmly welcomed," said James Crowley, co-head of investment banking, Prudential-Bache Capital Funding.

The Prudential affiliate is acting as agent in these transactions.

A statement from Moody's Investors Service Inc., New York, said the rating agency "does not expect wholesale rating reviews or downgradings" as a result of the buyback announcements made after the stock market crash.

"We're looking at each one to see whether it would have a material effect on capitalization," said Samuel Gordon, the director of industrial ratings at Moody's.

"I don't see wholesale changes, but there will be some rating impact," said Solomon Samson, a senior vice president at Standard & Poor's Corp., New York.

Concern about credit quality has not been an obstacle to companies interested in buyback programs, said Barry S. Friedberg, director of investment banking at Merrill Lynch Capital Markets, New York. "The advice we would give our clients is in the context of their financial policies relative to their objectives with credit ratings."

Standard & Poor's and Moody's have announced several credit reviews related to stock buyback announcements.

Both agencies placed American Medical International Inc. under review with negative implications after the leveraged company said it would buy $150 million of its own stock.

Moody's also announced a buyback-related review of National Distillers & Chemical Corp. and reported the focus of its existing review of Dayton Hudson Corp. has shifted to the company's buyback announcement.

Standard & Poor's placed MCA Inc., and two units of IC Industries Inc. on Credit Watch in moves that were related to announced stock buybacks. ■


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# Catch-22 . . .

*Continued from page 2*

management firm.

In fact, said William Ramseyer, president of Pension Realty Advisors, San Francisco, the stock market's plunge is good for overall real estate investing. "This will persuade pension strategists to increase the real estate allocations. Our feeling is this is the time to be diversified," he said.

Some pension executives must be thinking the same thing: Real estate managers and consultants report the number of feelers from prospective clients increased around the time the stock market began its gyrations leading to its historic 508-point drop.

AT&T's Mr. Roessler said increased inflation and volatility in the financial markets enhance real estate's appeal. "We might be approaching an opportunity going forward, depending on how this thing shakes out," he said. "We always try to be an opportunistic investor in real estate."

Fiduciaries will put more money into less volatile asset classes, regardless of their target allocations to those classes, said Bruce Ludwig, senior managing partner at TCW Realty Advisors, Los Angeles. He said some pension funds, especially public ones, likely will increase their commitments, because they have been funding their investments with cash flow, not by selling off other assets.

James A. Perry, executive director of the Pennsylvania Public School Employees' Retirement System, Harrisburg, which has $1 billion of its $12.4 billion pension fund in real estate investments, said his fund isn't up to its target allocation of 10%. "We do have money available if we found the right deal."

"The thing with real estate is you have to buy it right," Mr. Perry said. "We're not going to go out and buy a whole bunch of real estate just because the stock market went down."

It's also possible there will be fewer "right" deals: Under a market-induced recession scenario, vacancy rates would rise even higher, making real estate less attractive to pension investors that purchase fully leased properties *(see related story on this page)*.

James Richmond Jr., president of Aetna Realty Investors Inc., Hartford, Conn., theorizes cash from liquidation of stocks will go into real estate and could, eventually, cause real estate funds to become oversubscribed.

"I just hope managers don't take in too much more than they are prepared to invest. This could put the real estate market in an imbalance," Mr. Richmond said.

Louis Kingsland, senior vice president of Callan Associates, San Francisco, agrees with Mr. Richmond's theory. He fears an infusion of more capital could lead to overpricing, as more investors bid for the narrowing pool of real estate.

The type of real estate that will be attractive to investors, experts noted, is higher-quality property with predictable and stable returns. More speculative investments, such as pre-development land, could fall by the wayside.

"There's been an erosion of investor confidence that's going to cause people to be more cautious," said Kenneth A. Campia, president of LaSalle Advisors Ltd., Chicago.

Despite all the theorizing, at least one pension executive doesn't expect any significant changes in the real estate investing habits of pension funds.

"I'd be surprised if there were any sudden move in either direction," said W. Allen Harrison, assistant treasurer of Exxon Corp., New York, whose $4 billion fund has $400 million in real estate. ■

*Real estate writers Steve Hemmerick, John Covaleski and Chuck Paustian also contributed to this story.*

# Realty outlook poor

**With the stock market plunge coming at a time when the real estate market already is soft, fears of a market-induced recession prompt predictions of even higher vacancy rates, lower absorption and curtailed development.**

**Raymond Torto, economic consultant for Coldwell Banker/ Torto, Wheaton in Boston, said a recession would cause a significant drop in absorption during 1988 as well as continued reduction in construction.**

**"The net result is supply and demand fall, and there is a slight increase in vacancy, but nothing we call a significant change," he said.**

**He said vacancy rates, which now are about 19% based on a weighted average for the 30 top markets, would go to 20% in 1988 and would peak in 1989 before heading down.**

**Lawrence S. Bacow, director of research at the Massachusetts Institute of Technology — Center for Real Estate Development, Cambridge, Mass., said the "wealth effect" — how wealthy people feel and their subsequent spending habits — foretells a recession, and "people and institutions will put spending on the shelf."**

**If there is a recession, said James Snyder, president of Kennedy Associates Real Estate Counsel Inc., Seattle, there will be less need for office space and that will only worsen vacancy conditions.**

**Specifically, the financial services companies will shrink and that will translate to reduced space needs.**

**Finance-related companies in New York City leased 27% of the available office space in the first half of 1987, said Anthony J. LoPinto, senior vice president and director of financial services at Cushman & Wakefield Inc., New York. In addition, he said, reduced space needs will have a domino effect, halting development and hurting the leasing of completed projects.**

**Not everything connected with a recession would be negative for real estate.**

**David R. Hodes, senior vice president of Richard Ellis Inc., New York, said a recession could create buying opportunities. Pension funds, he noted, would be one of the few investor groups to take advantage of them.**

**Also favorable is the effect on financing, said Mr. Torto. Lower interest rates, which accompany a recession, would help people who are holding buildings. Financial institutions also would benefit, he said, because rates on loans they made during high-interest periods would be going down.**

**Among the property types affected by recession are industrial real estate, distribution warehouses and retail properties.**

# *Japanese buyers may pause*

**By Joanne Friedrick**

Japanese investors likely will continue to be major players in U.S. real estate, but might proceed more cautiously following the fall of the stock markets in the United States and Japan.

"I think the Japanese will pause. They have been financing (the purchase of U.S. property) through corporate borrowing, so the corporate net worth is impaired," said Lawrence S. Bacow, director of research at the Massachusetts Institute of Technology — Center for Real Estate Development, Cambridge.

The Japanese have been borrowing on floating rates, so even though interest rates are falling, volatility is going up, Mr. Bacow added.

"Further devaluation (of the dollar) will cause them to slow down their acquisition."

David R. Hodes, senior vice president at Richard Ellis Inc., New York, agreed a sharp drop in the dollar would cause the Japanese to exercise more caution because interest rates would effectively be lower.

So far, though, his firm hasn't experienced a decline in interest by Japanese investors.

Louis Kingsland, senior vice president at Callan Associates, San Francisco, is more pessimistic. He said the Japanese could pull out of the U.S. real estate market because of instability in the stock markets, providing some buying opportunities for U.S. institutions.

Prices of U.S. properties wouldn't drop, though, because there's already too much competition for quality real estate investments, said William Ramseyer, president of Pension Realty Advisors, San Francisco.

Although he has not seen a letup in the Japanese appetite for U.S. real estate, Mr. Ramseyer conceded concern about the financial markets might cause the Japanese to "rethink" their commitments.

James Snyder, president of Kennedy Associates Real Estate Counsel Inc., Seattle, predicted if the Japanese market is hit hard and there is no improvement in the U.S. market, the Japanese will buy less real estate here.

"I don't see (a pullout) happening," commented Paul Saylor, principal at Institutional Property Consultants, Atlanta.

Indeed, hard assets such as U.S. real estate will continue to be attractive, although the Japanese have suffered the same shaken confidence as U.S. investors, said Anthony S. LoPinto, senior vice president and director of financial services at Cushman & Wakefield Inc., New York.

"Those in the stock and bond markets here have been hammered," Mr. LoPinto said, "but not all are heavy players in the stock and bond markets, and they have capital available for investment."

The Japanese "can elect to invest in real estate rather than equities because liquidity isn't a big factor for them," said H. Lee Goodwin, senior vice president of The Horne Co., Houston.

"The excess capital is so great that they have to put money here in some form or fashion," Mr. Goodwin said. ■

# REITS . . .

*Continued from page 2*

"which went down more" than other REITs, such as those that contain mainly retail properties.

Yet L&N Housing Corp., a participating mortgage REIT that its sponsor labels a hybrid, began the month at 16⅞ and closed at 19⅛ Oct. 23.

Carey B. Wickland, president of L&N Management Inc., Dallas, the Lomas & Nettleton subsidiary that sponsors L&N Housing, wasn't surprised by the stock's movement. He said investors could have been responding to L&N's Oct. 12 announcement that earnings and dividends rose during the third quarter.

Mr. Lucas' calculations, done at the request of *Pensions & Investment Age*, lend credibility to REIT sponsors' long-held claim that their stocks are less volatile than the market as a whole. In fact, said Mr. Lucas and others, REITs should be looked upon as a defensive play and would be a good investment vehicle to turn to in the aftermath of the market tumble.

Stan Ross, co-managing partner of Kenneth Leventhal & Co., Los Angeles, said REIT yields make them a good investment. "The smarter money looks at it (REITs) as a real estate play," he added.

Of course, there's a flip side: REITs didn't fully participate in the bull market that characterized the first nine months of 1987.

Nevertheless, REITs performed as expected, said Thomas B. Swartz, chairman of The Sierra Capital Cos., San Francisco. "Most people who buy REIT shares don't buy them to trade them. (REITs) are just slower moving; leases don't turn over every minute," said Mr. Swartz, who saw one of Sierra's REITs gain a quarter of a point the day the market fell 508 points. ■


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# Management approaches: What Bloom off portfolio insurance

By Trudy Ring

Portfolio insurance worked — but not always as advertised.

In many cases, it did not provide the level of protection promised. And many of the vendors had to sell the underlying securities to get some protection when they couldn't sell futures because of a shortage of buyers.

Some clients are satisfied with how it worked; others are unsatisfied; and some aren't saying.

Portfolio insurance, also called dynamic hedging, is a computer-driven method of reducing a portfolio's exposure to stocks systematically as the market declines. Initially it involved selling the stocks and moving to cash.

As most recently marketed, however, it involved the sale of stock index futures in response to declines in portfolio value to protect the portfolio from further declines and assure a minimum return. The sale of futures creates a synthetic put option on the portfolio.

Dynamic hedging also can be done with bond futures to protect a bond portfolio.

Difficulties in stock index futures trading during the market's plummet Oct. 19 and the temporary shutdown of trading the following day led to speculation that portfolio insurance failed to insure, at least at the levels promised.

The consensus appears to be that dynamic hedging programs are missing their minimum rate of return targets slightly. One money manager said some insured portfolios now likely are one to four percentage points below where they should be to meet those targets when the programs wind down. The target rate of return and time horizon vary widely among programs.

Still, some pension executives and money managers said dynamic hedging worked satisfactorily. Others, including some who had been among its most vocal boosters previously, declined to discuss how it functioned. That list includes officials of Manville Corp., Denver; Bechtel Power Corp., San Francisco; Southern California Rapid Transit District, Los Angeles; and Leland O'Brien Rubinstein Associates Inc., Los Angeles, a pioneer in the area.

One of the satisfied customers is Allen W. Anning, director-retirement plan administration at Detroit Edison Co. The utility has $500 million of its $744 million pension fund hedged with portfolio insurance by J.P. Morgan Investment Management Inc., New York. The $500 million is all equities and represents all but about $112 million of the fund's equity allocation.

"Initially, it looks like it worked extremely well," Mr. Anning said.

The fund has three portfolio insurance programs, all aiming for no loss over various time periods. The programs may not quite meet that target, but it appears they will come close enough to be satisfactory, he said.

Detroit Edison has used portfolio insurance since February 1986. As the value of the insured portfolios grew through market gains, the fund reset the insurance programs to assure the current value of the securities, he said. Such resetting, called ratcheting, has proven critical to programs' success, he said.

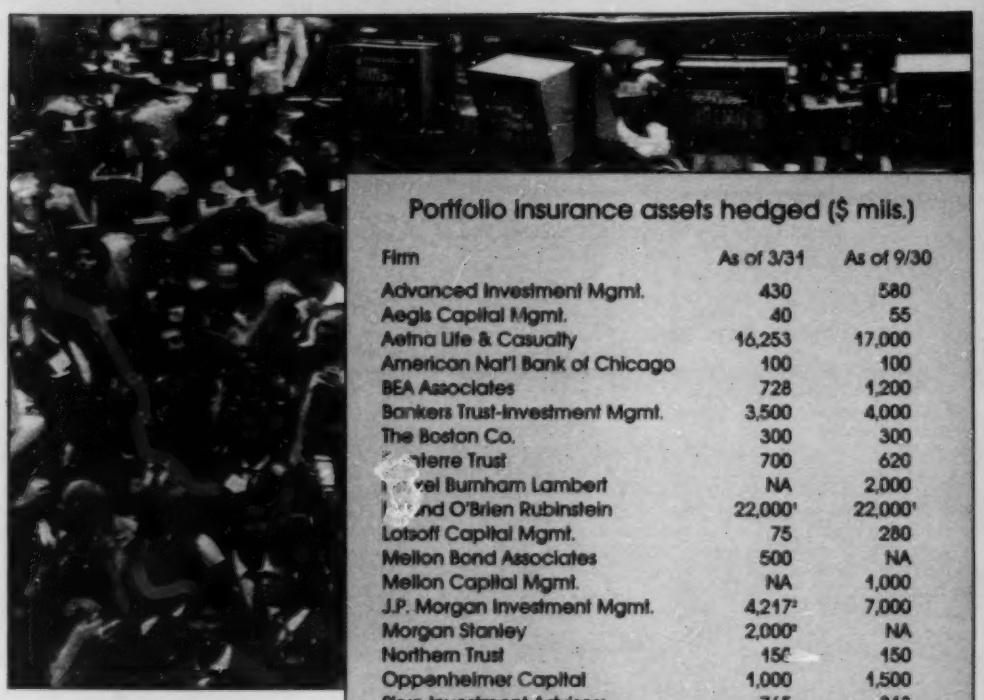
At Bayer USA Inc., Pittsburgh, the $550 million pension fund started a portfolio insurance program on $31 million in indexed stocks early in October.

"I believe it worked pretty well," said Jeff Benninger, manager-trust investments. "Those (managers) I've talked to indicated they were able to trade."

Mellon Capital Management Corp., San Francisco, runs the insurance program as well as the stock index fund. The insurance program aims for no more than a 5% loss over three years.

Some managers said, with some reservations, the strategy worked.

"It depends on who was implementing it," said Frederick L.A. Grauer, chairman of Wells Fargo Investment Advisors, San Francisco. Some managers decided it was too expensive to sell stock index futures at deep discounts Oct. 19, so they didn't trade; Wells Fargo did trade, both in the futures and, in the accounts where it had the authority, in the cash markets.



*Difficulties in stock index futures trading at the Chicago Mercantile Exchange and other futures exchanges led to speculation that portfolio insurance failed to insure, at least at the levels promised.*

**Portfolio insurance assets hedged ($ mils.)**

| Firm | As of 3/31 | As of 9/30 |
|---|---|---|
| Advanced Investment Mgmt. | 430 | 580 |
| Aegis Capital Mgmt. | 40 | 55 |
| Aetna Life & Casualty | 16,253 | 17,000 |
| American Nat'l Bank of Chicago | 100 | 100 |
| BEA Associates | 728 | 1,200 |
| Bankers Trust-Investment Mgmt. | 3,500 | 4,000 |
| The Boston Co. | 300 | 300 |
| [illegible]nterre Trust | 700 | 620 |
| [illegible]vel Burnham Lambert | NA | 2,000 |
| [illegible]nd O'Brien Rubinstein | 22,000[1] | 22,000[1] |
| Lotsoff Capital Mgmt. | 75 | 280 |
| Mellon Bond Associates | 500 | NA |
| Mellon Capital Mgmt. | NA | 1,000 |
| J.P. Morgan Investment Mgmt. | 4,217[2] | 7,000 |
| Morgan Stanley | 2,000[2] | NA |
| Northern Trust | 150 | 150 |
| Oppenheimer Capital | 1,000 | 1,500 |
| Skye Investment Advisors | 765 | 813 |
| The Travelers | 125 | 150 |
| Webster Capital Mgmt. | 0 | 80 |
| Wells Fargo Investment Advisors | 10,700 | 9,200 |
| Westridge Capital Mgmt. | 35 | 40 |
| TOTAL | 63,618 | 68,068 |

[1] *Pensions & Investment Age* estimate
[2] As of Jan. 1

Because of the gaps between stock and futures prices that day, some of Wells Fargo's accounts fell below their minimum rates of return, but they made that up in the following days, Mr. Grauer said. "Our accounts are, for all intents and purposes, where they should be," he said. "There was significant delivery on the promises of portfolio insurance."

"I think it still does what it says," Jim Carder, president of Westridge Capital Management, Los Angeles, said of dynamic hedging. The deep discounts at which Standard & Poor's 500 stock index futures were selling during the market's drop and the extreme volatility of the market made portfolio insurance more costly than anticipated, but these factors don't invalidate the concept, he said.

"Futures were a very difficult market to move in," said Tom Allen, president of Advanced Investment Management Inc., Pittsburgh. For some accounts in which Advanced manages both the underlying securities and does the dynamic hedging, it sold the securities rather than shorting futures.

Webster Capital Management, New York, was able to do this in all its accounts, said Jon Jankus, director of investments. "Having the flexibility to move both in the cash and the derivative markets — thank God," he said. "I'm sure

*Continued on page 51*

# Drop may take steam out of indexing

The dramatic slip in the U.S. stock markets may slow the flood of pension assets into index funds, some financial experts predict.

Index funds, designed to match the performance of major indexes and avoid the high costs of active equity management, "obviously took a big hit," said Sam DeKinder, executive vice president at DeMarche Associates, Kansas City, Mo. From Oct. 1 to 23, the Standard & Poor's 500 stock index declined 22.9%, according to DeMarche, while the Dow Jones industrial average dipped by 24.9%. Through Oct. 26, they dropped 29.3% and 30.9% respectively.

"I think you may now start to see a shift toward a more conservative posture. Unfortunately, many plan sponsors will start to rethink their investment policies under crisis conditions, not a terribly great time to be making these types of decisions," he said.

"Indexing will slow because basically sponsors had been making an asset allocation decision toward equities with indexing and were saying active equity managers could not outperform the index. . . . The index funds took whatever hit the index took because they are fully invested and there is no cash there."

Noel Feldman, investment consultant with Hewitt Associates, Santa Ana, Calif., agreed indexing may fall on hard times.

"We've been saying for some time that people have been viewing index funds almost as a conservative way to invest in the equity market. You are assuming, though, the full market risk by using index funds without any investment manager to do anything at all to soften the blow," he noted. "Virtually all active managers will outperform the market in this type of decline to some degree. This will drive home the point that index funds are not the comfortable, conservative investments many had believed."

David Bostian, president of Bostian Research Associates, New York, said the decline of indexing will lead to enhanced awareness of market-timing and asset allocation disciplines.

"The S&P has taken such a vicious smash that people will realize that timing and asset allocation have some real value, and my guess is that people will blow out of indexes into cash for the time being. The momentum toward indexing has stalled," said Mr. Bostian.

Frederick L.A. Grauer, president of Wells Fargo Investment Advisors, San Francisco, which oversees the largest pool of indexed assets, disputes the notion there will be a shift away from indexing.

"I think the future remains very bright," he said. Mr. Grauer said the S&P remains in the top performance quartile in most performance surveys over three to five years and "it remains the case that most active managers are having trouble beating the benchmarks."

Wells Fargo had total S&P indexed assets of $33 billion as of Sept. 30.

Most of the indexed assets were unhedged, he said, and moved with the market. Wells does offer its clients the option of having portfolio insurance, and has about $9 billion protected by the strategy. He said he expects more clients to elect to have portfolio insurance on their indexed accounts.

Mr. Grauer said the trend by pension funds toward indexing should continue once the market settles.

"First, the performance game is still much disposed to market benchmarks and second, the secular argument today is widely accepted and more pension funds are using index funds as part of their structural part of the architecture of the plan as a way of achieving more controlled results at a very low cost. The secular argument remains intact," he said.

"Also, in the past 10 months equity market performance has been strong and has taken many plans up to their maximum commitment to equities. As a consequence, there has been a drawdown on indexed assets because it was the cheapest way to adjust the asset mix back to normal.

"With the drop in equity values, that's no longer a problem. I suspect a number of sponsors now will have less equity exposure than they need and I look for a flow toward indexing," said Mr. Grauer.

Luke Mazur, chief investment officer for Northern Trust Co./Strategic Investment Services, Chicago, which manages a $4.3 billion equity index fund, said he expects the interest to remain in indexed products.

Northern's indexed assets are not hedged and declined "in line with the market," he said. He added no adjustments were made in the fund and "at some point the market will test the lows. Then it will be up to clients as to how they reallocate their assets." ■

# worked, what didn't

# Timers call market right

*Continued from page 50*

there were a great many portfolio insurers who needed to trade (futures) and couldn't."

Webster moved its portfolio insurance accounts fully into cash Oct. 16, one trading day before the 508-point plunge.

On that Monday, Oppenheimer Capital Corp., New York, suggested its portfolio insurance clients buy futures after having sold them short previously, therefore closing out futures positions, said Gene Brody, director of options management. Oppenheimer didn't try to sell any futures Oct. 19, he said.

Bankers Trust Co. — Investment Management Group, New York, met its hedging targets in 10 of its 12 portfolio insurance accounts, in which it also managed the underlying securities and sold them rather than use futures, said Dean D'Onofrio, vice president and manager-quantitative investments. In the others, the manager had to sell discounted futures or do nothing.

"It's no secret that the stock index futures, because of too many sell orders and not enough buy orders, haven't been trading at their fair value," Mr. D'Onofrio said. "Portfolio insurance is still attainable, but it is attainable only if you can trade in the underlying securities."

Insured accounts didn't go down as much as the market, said Pete Thomas, vice president of Skye Investment Advisors Inc., Cupertino, Calif. The Equity Guard Stock Fund Inc., a mutual fund for which First Republic-Bank Dallas manages equities and Skye provides dynamic hedging, was down 7.2% for the period July 1 through Oct. 22, while the S&P 500 was down 18.3% for that period, he said. The fund aims for no loss over a year and will come close to that, Mr. Thomas said.

However, coming close to meeting a goal doesn't satisfy some investors, and some managers are rethinking their dynamic hedging methods. "You just have to accept the fact there are certain conditions (in which) you just don't function," Oppenheimer's Mr. Brody said.

The Boston Co., Boston, had some difficulty in trading futures and had to sell them at discounts, said Richard A. Crowell, managing director, structured investment products group.

But while providing some protection, the trades didn't provide what was promised. For instance, Mr. Crowell said, one of his clients aimed for a minimum loss of 5%; the account probably will be down 8% or 9% at the end of its time horizon, although it likely will be ahead of the market.

Aetna Life & Casualty Co., Hartford, Conn., is moving its dynamic hedging clients into different types of programs, said Ralph Tate, vice president. Some will involve changing the parameters of futures-based hedging programs, and some will be moving away from futures-based programs to those implemented in the cash markets, Mr. Tate said.

Portfolio insurance's harshest critic contends the stock market's slide proved him correct. "People are going to see it doesn't work and it's going to die a natural death," said Richard Brignoli, president of Brignoli Models Inc., New York.

Mr. Brignoli and his partner, William M. Morris, also said portfolio insurance exaggerated the market's decline. Mr. Brignoli added dynamic hedging programs add to the market's volatility because they create demand when there's already demand and supply when there's supply. ■

The best-performing investment managers emerging from the rubble of the stock market tumble likely will be asset allocators that employ a form of market-timing discipline, and the market timers themselves

Noel Feldman, investment management consultant with Hewitt Associates, Santa Ana, Calif., said the best-performing investment managers were primarily three-class allocators that switch among equities, cash or bonds, and happened to be in bonds before the market dropped.

"I'm not sure the (pension) plan sponsors have fully discovered these guys yet. It looks like now they have proven their merit," said Mr. Feldman.

Renaissance Investment Management Inc., Cincinnati, with $1.25 billion under management, is a three-class allocator that began shifting out of stocks as early as February and into intermediate-term bonds. It liquidated its remaining stocks in May and bought bonds.

"We are active asset allocators; it is similar to market timing but our style is fundamentals driven," said Frank Terrizzi, chief investment officer at Renaissance.

"It is an emotion-free system based on historical data, prices, earnings, dividends and yields. If returns on stocks and bonds are equal, we split between them. If the returns are 10% greater in one, we shift to that category."

"In February, our asset allocation model indicated bond returns were equal to stocks, and we were 50-50. In May, the returns on bonds became 10% greater than stocks and triggered a 100% move to Treasuries.

"We took a lot of heat from our clients who saw the market going up. The last six weeks for us have been the most trying time since we've been in business. Some clients defected, but this market has been a vindication of our methodology," said Mr. Terrizzi.

Renaissance had a first-quarter return of 18.9% followed by −5% and −5.3% in the second and third quarters; for the year to date through Oct. 23 the firm was up 11% to 12%, said Mr. Terrizzi.

Avatar Associates, New York, an equity and strategic asset allocation manager, expects to benefit from the market shakeout, said Bruce Poliquin, vice president.

He said Avatar had been bullish on the market through early September, when it moved away from its 85% invested position and raised cash to 55%.

The decision was the result of the Federal Reserve Board's credit tightening, foreign investors not pumping new money into the market, liquidity drying up and expected interest rates hikes.

Just before the drop, he said, client confidence in Avatar's approach was manifested in an increase in assets under management. Within the past month, he said, four pension funds — K mart Corp., Troy, Mich.; Boston City Retirement System; Kroger Co., Cincinnati; and Browning-Ferris Industries, Houston — either hired Avatar or increased existing accounts with the firm.

Shifts away from the equity market were not restricted to asset allocators.

John M. Cunningham Inc., Wayne, Pa., a value-style manager with assets of $16 million, shifted to a 95% cash position this summer, said John M. Cunningham, chief investment officer. "It was plain and simple the valuation on the market and my issues indicated there was not enough upside and considerable downside risk in the market."

Mr. Cunningham said clients have called, not to complain, but because "a lot of people are caught in the mystique of what's happening in the market. Even though I've told them we are in cash, they are still calling just to check and make sure."

Another value manager, Mark Raclin, executive vice president with Lowry, Raclin, Harrell & Howerdd, Chicago, said the firm has done "significantly better than the market in equities and has beaten the S&P by a couple of hundred basis points."

"It is our feeling that the market has gone from the place where it was a very poor value to a place where it is still a little above average value, by some measurements. A month ago we thought it was a poor value."

"Some clients defected, but this market has been a vindication of our methodology."

**Frank Terrizzi**
**Renaissance Investment Mgmt.**

Mr. Raclin said the firm was "probably only about 30% invested Oct. 14," and was "at or near a minimum equity position from midsummer or earlier. We missed the last 100 points on the Dow on the upside because we felt there was no way of knowing how high the market would go."

Mr. Raclin said there has been "too much second guessing and tea-leaf reading" in the aftermath of the market drop. There are "basic financial and economic reasons underlying the market actions," he said, "and when it gets too high it goes down, then when it gets too low it goes up. Decisions need to be made before that happens, not after."

For months before the start of the October market drop, Wall Street analysts and financial specialists had been warning the market was overvalued, overextended and overbought and were advising investors to prepare for a pullback.

"This decline shouldn't have been a surprise to anyone who analyzed the market," said Edwin Fiske Thrall, chief investment officer at Fiske Capital Management, Wellesley Hills, Mass. Fiske moved out of the equity market into cash in March and April, he said, "because the market was so obviously vulnerable."

Fiske Capital also applies a cyclical asset allocation strategy to investing in the equity market, moving between stocks and cash.

"We base capital in the money markets and only go into equities when they are moving upward and the risk factors are reasonable . . . Throughout most of this year, this has been a market driven by emotion. It came unraveled very quickly, and we felt we should stand aside," said Mr. Thrall.

Fiske has nine levels of aggressiveness, he said; the middle one falls between returns on the S&P and money markets.

"We move in stages, normally we move into the market gradually and move out quickly," he said. "The approach provides investors with the advantages of being in the market without most of the risk."

Three weeks before the market slip, Dana Investment Advisors, Brookfield, Wis., which employs market-timing techniques, shifted to 90% cash in equity accounts.

"A lot of it was basic common sense. The market was overvalued. There were a lot more stocks declining than advancing. We decided to take our profits and run," said Jim Ivey, chief strategist at Dana. "We had the gains we wanted. We did take some heat for a while. We aren't geniuses; we took our profits and got out." ■

*Editors note:* The stories on market timing, quantitative and index managers were reported and written by Fred Williams.

*Pictured from left: Theodore Aronson of Aronson & Fogler; Daniel Schweihs of Disciplined Investment Advisors; and Dean LeBaron of Batterymarch Financial Management.*

# Quant managers take hit in stride

Computer-driven quantitative equity managers, fully invested because of their methodology, felt the brunt of the October stock market drop.

The computerized stock selection and investing process is designed to keep portfolios committed to the market. But quant managers have seen no significant pullback by clients concerned the process may not have worked.

"We have given back the gains we experienced earlier this year," said Theodore Aronson, partner at Aronson & Fogler, Philadelphia, with about $175 million under management.

Quantitative managers claim the investment style functioned as it was designed to do, but they were caught in a market in which everyone was cut by the same broad sword.

Mr. Aronson said quants are characterized by "the lack of emotion. Our computers don't know the market is down by 508 points. It is unemotional and ruthless in doing its job and allows you to ply your trade in an unemotional, disciplined fashion.

"I think you will see quant managers come out of this better than other managers because of the unemotional approach. In violent, volatile times like these, discipline has obvious payoffs. It keeps you from following the crowd."

Mr. Aronson said he remains fully invested and through Oct. 26 equity performance at Aronson & Fogler had declined almost in line with the Dow Jones industrial averages. The Dow was down about 30% as of that date while his portfolios were down 28%, he said.

Daniel J. Schweihs, principal of Disciplined Investment Advisors, Evanston, Ill., acknowledged being down in line with the market, but he expects the disciplined style to be vindicated by market conditions over the longer term.

"If you bought the market in 1982 at 860 on the Dow and the intraday low was 770, you don't look bad five years later because you missed the low. If you have a long investment horizon, the same holds true today," he said.

"If you bought at 10% above the bottom it was still a good long-term investment. In 15 years, this will be an interesting event in history," said Mr. Schweihs.

Perhaps the best-known computerized stock selection process is applied at Batterymarch Financial Management, Boston, with $10 billion under management.

Dean LeBaron, president and chief investment officer, said the firm's quant investment process didn't outperform the market.

"Our (program) is designed to keep us fully invested and almost everything went down equally in this market," he said.

"Our quant screens are designed to compare relative valuations around the globe and how corporations value themselves."

He said the Batterymarch process is designed to "implement rather than think" and said he remains committed to the process.

"I'd guess there was a 10% chance of a financial accident before (the market drop), considering the velocity of money in the system and other factors. That has gone up now to a 30% chance," he said. "Are you worried? Sure, but you don't change your strategy at nythis point. We continue to do the same things we have always done." ■

# Aftermath . . .

*Continued from page 1*

Means Committee proposal to limit the tax deductibility of interest payments on money borrowed to finance takeovers or stock buybacks.

"We've ridden a long wave of prosperity and the market was overvalued," said H. Kent Atkins, chief investment officer of Bankers Trust Co. — Investment Management Group, New York. "It's a sizable correction, and it occurred very rapidly, but it's still a long foreseen correction," he said.

"When bubbles burst," said William L. Fouse, chairman of Mellon Capital Management, San Francisco, "things come down quickly. The rapidity was perhaps exaggerated by portfolio insurance."

**The impact**

Executives at many institutions emphasized that although they and others had suffered paper losses, the crash was not a disaster. Most of them reported declines close to, or just slightly below, the market decline, and emphasized they lost only what they had gained this year. They still have four years of bull market gains in their portfolios.

The American Telephone & Telegraph Co. pension fund, New York, declined less than the market during the crash, said David P. Feldman, corporate vice president.

The fund, which had $31 billion in assets Sept. 30, was 50% in stocks before the crash, equally divided between passive and active management. While the passive portfolios declined about as much as the market, the best-performing active manager was down only 10%, he said.

Overall, the market drop put the fund back to its size at the beginning of the year.

"It was a hit, but I think it's a part of the business we're in," Mr. Feldman said. "The markets go down as well as up. It's a lot more fun when they go up, but everyone anticipated a correction."

The $13 billion University of California pension and endowment funds, which typically are 75% invested in large-capitalization, well-financed companies with consistent growth records, "had spectacular performance before the crash," said Patricia Small, associate treasurer.

During the crash, "the whole portfolio lost about 20% of its value. We went from about $10 billion to about $8 billion in common stocks. Our common stocks had been up 38% from the first of the year until Sept. 30, so we gave up a large part of the gain."

Based on interviews with more than 30 major institutional investors, *Pensions & Investment Age* estimates the 100 largest managers of pension funds lost $140 billion in pension assets during the crash.

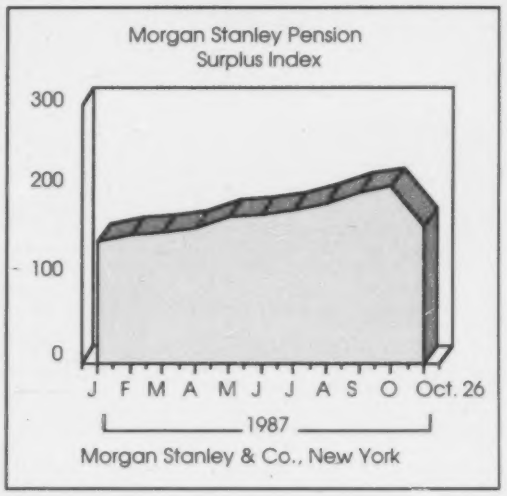
And as the charts on this page and page 1 show, corporate pension funds in aggregate still have a healthy cushion of surplus assets.

In fact, pension funds have almost as large a surplus after the crash as they had at the beginning of April. The Morgan Stanley Pension Surplus Index started the year at 132.96, rose to 144.87 by April 1, peaked at 176.11 Oct. 1 and fell to 144.6 Oct. 26.

Marty Leibowitz, a partner at Salomon Brothers Inc., New York, estimated pension funds assets were about 60% greater than liabilities April 1, and they grew to be 104% greater Oct. 1. By Oct. 26 they had declined substantially, but still were 60% greater than liabilities.

Pension funds "haven't given back all the gains yet," said Jeremy Gold, principal at Morgan Stanley & Co., New York. "If things stabilize where they are, we would still see lower pension expense in 1988 than in 1987."

According to Mr. Leibowitz, pension funds have been hit by a "double whammy" since the crash. Not only have stock prices plummeted, but declining interest rates have increased the present value of liabilities. This explains why the pension surplus declined more than 40%, significantly more than the market. Nevertheless, he said, pension funds, overall, are still well funded.




As a result, there is no sense of panic among pension fund executives and trustees.

The equity portfolio of the California Public Employees' Retirement System, Sacramento, declined $7 billion from a high of $21 billion between the end of August and the end of the day Oct. 19, but the fund's trustees reacted calmly and supportively, said Greta Marshall, investment manager.

They understand market corrections occur, Ms. Marshall said. In addition, the fund had gains in its fixed-income portfolio during the same period that partly offset the losses in the equity market.

**Some were buying**

The immediate reaction to the decline by a number of institutions was to buy stocks because value was detected in the market once again.

"You can look across the board and it's a bargain," said O. Thomas Barry III, senior executive vice president and director of investments for George D. Bjurman & Associates, Los Angeles.

Bjurman, which had raised some cash before the crash, has used some of it in buying such stocks as **Anheuser-Busch Cos. Inc., Dow Chemical Co., Smithkline Beckman Corp., NCR Corp.** and **Digital Equipment Corp.**

"We bought hundreds of millions of dollars in stocks, mostly great big blue-chip companies — the ones that got the hell beat out of them," said Peter Anderson, senior vice president-investments at IDS Financial Services, Minneapolis.

"We said this was a good time to buy, so we've been buying," said Ms. Marshall. "We had $3 billion in buying reserves and we have been trying to get the best deals."

She noted fund officials had said long before the crash they would buy into any decline, and because the fund was providing liquidity in the panic-driven market, it was able to drive hard bargains.

Independence Investment Associates, Boston, which had raised equity portfolio cash to 20% early in the year, also bought in the aftermath of the crash.

"We began buying heavily (Oct. 19) and then continued the buy program aggressively on Tuesday. By the end of the day Tuesday, we were fairly close to fully invested," said William Fletcher, executive vice president and chief investment officer.

Centerre Trust Co. of St. Louis, had cash reserves of about 5% when the crash began and redeployed that in the market during the sell-off. In addition, it sold some bonds in balanced accounts to buy bonds at "bargain prices," said Jim McGuire, senior vice president.

The New Jersey Division of Investment put about $100 million into the stock market during the week ended Oct. 23, said Roland M. Machold, director. "We think this is panic oriented." He said the fund might commit more, "but since the market has been moving toward us, we might wait and see."

**Short-term effects**

Institutional investors generally saw both short- and long-term effects of the crash.

The short-term effects largely revolve around the economy and the government.

Most interviewed expect some slowing of the economy, but do not expect the crash by itself to bring on a recession.

"Our view is that the actual damage to the economy in terms of wealth effect probably won't be too bad and won't lead to the conclusion that we're heading into a recession. I don't think that's in the cards," said Victor J. Melone, chief investment officer, Manufacturers Hanover Investment Corp., New York.

"Wall Street and the brokerage community have come out of this in far better shape than anyone had a right to expect. That's quite bullish, and the result is that we'll be able to bounce back much faster."

Frederick Joseph, chief executive officer, Drexel Burnham Lambert Inc., New York, said the damage to Wall Street will include "a lot of broken deals."

Initial public offerings "are going to be very difficult to do. In mergers and acquisitions and (leveraged buy-outs), most deals (previously in the works) are being renegotiated," he said. In addition, the high-yield bond market is being segmented by qualit, with the bottom quartile "having a hard time finding people to step up and buy the issues."

"Near-term, capital is very nervous, but when it analyzes the numbers, it is available," he said.

Most investors interviewed also

*Continued on page 54*

# Financing . . .

*Continued from page 2*

Medium-term note programs have been especially popular, because they offer flexibility. Issuers offer to sell the continuously offered debt to investors at certain rates for various maturities. Among those issuing such debt since the market plunge are Eastman Kodak Co., Rochester, N.Y.; ITT Financial, an operating unit of ITT Corp., New York; General Electric Credit Corp., Stamford, Conn.; Johnson & Johnson, New Brunswick, N.J.; and General Motors Acceptance Corp., Detroit. Investment bankers expect to see many more in the weeks ahead.

"You can take advantage of rates without going to a full debt issue," said Mr. Starkman of American Express, which has filed a $500 million shelf registration with a piece carved out for medium-term notes.

"You can do it at a bit lower cost in these shorter maturities. It's a way to issue paper quickly . . . and you can fund opportunistically."

Wall Street's finance experts point out that intermediate financing may be the answer for many companies, because it can tide the company over until the market settles and the future course of interest rates becomes clear while providing for short-term financing needs. They stress these financing alternatives are not a substitute for equity offerings, only a chance to take advantage of the lower interest rate environment.

"Advise them (corporate treasurers) to take advantage of some windows, especially MTNs, for intermediate financing and then wait and see," said Robert A. Schwartz, vice president and senior financial economist, Merrill Lynch Capital Markets, New York.

Internationally, the environment for U.S. corporate issuers is much less attractive. Shell-shocked foreign investors are wary of dollar-denominated debt. According to Salomon Brothers, the week after the crash international issuance by U.S. corporations stood at $158 million, compared to the $2 billion monthly average for the first nine months of 1987. None of the issues was U.S.-dollar denominated.

Investment bankers also recommended financing alternatives such as incorporating some kind of option in the 10-year bond such as a call option. In that case, a company would issue a 10-year bond, non-callable for five years, then sell the call option back to the underwriter to earn the option premium. The issuer would end up with a 10-year, non-callable bond. Some issuers are also looking at swapping floating-rate debt for fixed-rate debt.

The corporate finance experts also agree there are fewer options in this volatile market for non-investment grade companies, which often rely on the junk bond market for financing. That market has skidded as investors fear that an economic downturn will be bad news for junk bond-financed companies. There's been a dearth of new issues. Investment bankers urge non-investment grade companies to stay on the sidelines until the market calms down.

The biggest losers likely will be start-ups, which rely on initial public offerings and venture capital. The IPO market came to a grinding halt and venture capitalists who can afford to be more selective are turning to companies that have moved to the second phase of growth.

"We view this as an opportunity to improve the quality of our portfolio in later stage growth companies," said venture capitalist Alan Patricof, chairman of Alan Patricof Associates, New York.

Elsewhere in the private placement market, which is flourishing, cash-rich institutional investors are bargain hunting, albeit with caution.

For some companies, it may make sense to seek out the private placement market, which can provide competitive terms and quick turnaround.

"There's plenty of money. We have money to invest, but right now there's more talk than action," said Rodney Reynolds, senior managing director, Prudential Capital Markets Group, adding that most business is being done with the highest quality companies. He said there was still a "reluctance" to do business with weaker credits because of the uncertainty of the impact of the economy on those companies.

"Quality and value are what we are looking for," said Jack Cartland, vice president-private finance, Aetna Life & Casualty Co., Hartford, Conn.

Financing availability depends to some extent on what the money will be used for. Some financing sources are reluctant to lend money for expansion plans until the market settles. In the leveraged buy-out market, funding hasn't dried up entirely for companies trying to raise money to do buy-outs.

Joseph L. Rice III, president, Clayton & Dublier Inc., a New York private investment firm, said he is not having trouble arranging $200 million in financing to acquire the Oklahoma division of Safeway Stores Inc. The transaction was announced five days before the market collapsed.

"The amounts may be marginally less (from the banks) and it may be marginally more expensive," Mr. Rice said. "The net-net is sound transactions will go through."

He added institutional investors that have previously committed funds to buy-outs arranged by Clayton & Dublier had not pulled back because of the stock market crash. ■

## Public offerings in difficult markets*

| Week beginning | equity vol.[1] ($ mils.) | # of issues | S&P 500 | debt vol.[2] ($ mils.) | # of issues | Shearson-Lehman Long-Treasuries Index[3] |
|---|---|---|---|---|---|---|
| 9/28/87 | 479.1 | 13 | 328.07 + 2.5 | 1,224.3 | 12 | +0.13 |
| 10/5/87 | 760.7 | 24 | 311.07 − 5.2 | 2,956.1 | 23 | −2.21 |
| 10/12/87 | 501.9 | 13 | 282.70 − 9.1 | 1,705.3 | 13 | −1.98 |
| 10/19/87 | 401.8 | 4 | 248.22 − 12.2 | 3,887.9 | 27 | +9.21 |
| 10/26 - 10/28 | 0 | 0 | 233.28 − 6.0 | 921.8 | 7 | −0.07 |

* Figures calculated on net proceeds basis
[1] Common and preferred stock only
[2] Convertible and non-convertible issues
[3] Average maturity 23 years
Source: IDD Information Services, New York

11/19/87 C2710-2


# Pensions & Investment Age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The newspaper of corporate and institutional investing • $4.00 an issue • $80 a year • November 16, 1987

**Cost of funding retiree medical benefits**

| | | Pension funding methods | | |
|---|---|---|---|---|
| Year | Pay-as-you-go | Projected unit credit | Entry-age normal | Aggregate |
| | Annual contribution per active employee | | | |
| 0 | $ 200 | $1,100 | $1,400 | $1,500 |
| 10 | 300 | 1,500 | 1,700 | 1,600 |
| 20 | 800 | 1,500 | 1,600 | 1,500 |
| 30 | 1,500 | 1,700 | 1,800 | 1,500 |
| 40 | 2,600 | 2,700 | 3,000 | 2,800 |
| 50 | 4,300 | 4,400 | 4,900 | 4,700 |
| | Fund ($ millions) | | | |
| 0 | 0 | 0 | 0 | 0 |
| 10 | 0 | 154 | 192 | 193 |
| 20 | 0 | 375 | 426 | 426 |
| 30 | 0 | 617 | 668 | 667 |
| 40 | 0 | 1,243 | 1,331 | 1,273 |
| 50 | 0 | 2,470 | 2,649 | 2,2482 |

Source: Employee Benefit Research Institute, Washington

# Retiree health proposal could damage stocks

By Fred Williams

WASHINGTON — The recent plunge in stock market prices may be insignificant compared with the drop that could result if the Financial Accounting Standards Board requires corporations to accrue liabilities for retiree health benefits on their balance sheets.

The co-authors of a new study on measuring and funding corporate liabilities for retiree health benefits warn stock prices could suffer significant downward pressures after the FASB begins requiring companies to accrue these liabilities. The final FASB ruling is expected late next year.

If, as expected, the FASB adopts such requirements, the annual expenses of corporations providing retiree health benefits could be from two to eight times current expenses, according to Bill Reimert and Phyllis Doran, consulting actuaries with the New York-based firm of Milliman & Robertson, and co-authors of the study released Nov. 12 by the Employee Benefit Research Institute Education and Research Fund.

*Continued on page 86*

# Inside:


CORPORATE FINANCE: The stock market crash has thrown a curve at the phenomenon of high-yield bonds; institutional investors are remaining bullish, despite plans by companies to cut back on new offerings — Page 71.

CONSULTANTS: Executives of tax-exempt funds rely on consultants for a lot more than just consulting. *Pensions & Investment Age* examines the myriad of ways consultants help funds and profiles more than 100 of them — Page 31.

...ives are ...ptions to ...ed ...day's stunning stock market crash — Page 15.


# Funds targeting '88 proxy fights

By Marcia Parker

Brimming with confidence after their first proxy season as full-fledged activists, institutional investors have targeted more than a dozen companies, including International Paper Co. for the second time, for their 1988 campaigns to get poison pills rescinded.

The $25 billion Teachers Insurance and Annuity Association — College Retirement Equities Fund, New York, which is in the process of finalizing its plans for the upcoming proxy season, notified Purchase, N.Y.-based International Paper last week it is sponsoring an anti-poison pill resolution there for the second year in a row. CREF wants the International Paper poison pill rescinded unless it is approved through a shareholder vote.

The $31.5 billion New York City Retirement Systems plans as many as 14 anti-poison pill resolutions, but has not yet finalized the list of companies.

District unions of the $10 billion United Brotherhood of Carpenters Union, Washington, are sponsoring anti-poison pill resolutions at Boise Cascade Corp., Boise, Idaho; and MCA, Universal City, Calif.

The $13.5 billion State of Wisconsin Investment Board, Madison, is sponsoring a resolution at Allied-Signal Inc., Morristown, N.J., to force the company to put a shareholder rights plan to a stockholder vote.

Even though the 1988 proxy season is months away, big public pension funds already have selected the companies and the corporate governance issues that are sure to generate another round of heated debate between institutional investors and big business in 1988.

This year's proxy season was dominated by resolutions calling on companies to withdraw shareholder rights plans, which boards enact — sometimes without shareholder approval — to make it harder for the firm to be taken over. Nearly 60 companies faced challenges on such poison pills in 1987. None passed, but several resolutions netted a relatively strong show of support from shareholders.

It's too early to tell if 1988 will be a repeat of 1987, but it's clear there will be plenty of sponsors of anti-poison pill and anti-greenmail resolutions and other resolutions calling for confidential proxy voting and for companies to pull out of South Africa.

Sources also said at least one public pension fund is considering trying to get a director elected to the board of certain corporations and another public pension fund is considering hiring a proxy solicitation firm.

The hiring of a proxy firm would be a first, and could indicate public pension funds would be willing to wage a full-scale proxy solicitation campaign. That would escalate their participation from merely acting as sponsors of proxy resolutions.

Sponsors who want their resolutions to be included in the 1988 proxy statements companies prepare in advance of annual meetings must notify most companies this month and next.

In recent days, the first letters have gone out to chief executives across the country, according to resolution sponsors, proxy firms and company executives. International Paper, Boise Cascade and Allied-Signal received their letters. Gillette Co., Boston, heard from the $38 billion California Public Employees' Retirement System, Sacramento, which is sponsoring an anti-greenmail resolution.

Scores of other companies will be targeted in the coming weeks. Although institutional in-es-

*Continued on page 85*

# Corporate earnings safe despite market plummet

By Barry B. Burr

Corporate financial executives don't expect October's stunning market crash to affect pension expense or corporate earnings that will be reported for 1987.

Top management at a number of the companies sampled requested special reports from their pension accounting and investment executives on the effect of the crash on corporate financial reporting under the Financial Accounting Standards Board's Statement 87.

The pension accounting statement, unlike the old Accounting Principles Board Rule 8, requires much of the volatility in pension earnings, assets and liabilities to flow directly to the income statement and, beginning in 1989, to the balance sheet.

The upshot of their reports eased fears.

"It's not the market that crashed; it's those expectations" of high returns, said Gary Pines a consultant at Towers Perrin Forster & Crosby, Chicago.

At Hewitt Associates, Lincolnshire, Ill., Michael L. Johnston, partner, said, "Pension funds did not lose anything. They lost the expectation of a whole lot of overfunding."

In interviews, corporate executives said they would end up with overall investment gains for 1987, and slightly larger

*Continued on page 85*

It's not the market that crash... it's the expectations of high return...
— Gary Pi...

# Managers split on world scene

**By Marlene Givant**

Bottom-up international managers are divided on whether markets have bottomed.

Some are tickled over the cut-rate stocks around the world and are buying like crazy; others are on the sidelines, leaving money in bonds and short-term instruments.

Many are waiting because of the sharply reduced liquidity in markets other than Japan, the United Kingdom and West Germany and because they need a clearer economic sense to re-evaluate company earnings estimates.

The country mix of the managers, which results strictly from bottom-up stock selection, has changed little since Black Monday.

For all international managers in InterSec Research Corp.'s universe, the median portfolio's geographic asset mix in the third quarter overweighted the hard-hit Pacific Basin and U.K. market as compared with the Morgan Stanley Capital International Europe Australia Far East index, and underweighted Japan, which suffered relatively little compared to other major markets.

The median fund had 31.5% in Japan, 12.5% in other Pacific Basin markets, 19.5% in the United Kingdom, 26.3% in continental Europe, 2.8% in other markets and 1.9% in cash at the end of September, according to the Stamford, Conn., research firm. That represented only a slight change from the second quarter.

The EAFE index had 56.1% in Japan, 5.8% in the rest of the Pacific Basin, 15.6% in the United Kingdom, 22.2% in continental Europe and 0.3% in other markets.

**Geographic asset allocation of non-U.S. portfolios**

| Country/region | InterSec median portfolio | | EAFE | |
|---|---|---|---|---|
| | 3rd qtr. | 2nd qtr. | 3rd qtr. | 2nd qtr. |
| Japan | 31.5 | 32.4 | 56.1 | 56.8 |
| Other Pacific Basin | 12.5 | 10.1 | 5.8 | 5.0 |
| United Kingdom | 19.5 | 21.0 | 15.6 | 15.5 |
| Continental Europe | 26.3 | 25.0 | 22.2 | 22.4 |
| Other | 2.8 | 2.2 | 0.3 | 0.2 |
| U.S cash | 1.9 | 2.3 | NA | NA |

Source InterSec Research Corp., Stamford, Conn.

"The crash and horror that hit everyone when the markets of the entire world became illiquid for a whole day brought home to people that liquidity in a market is totally important. Therefore the tendency for most people is to put money into more liquid markets," said David Skinner, managing director of Martin Currie Ltd., Edinburgh, Scotland, which managed $310 million for U.S. tax-exempt clients at the end of September.

Although bottom-up managers focus on stocks more than markets, many are stumped by the current economic uncertainty.

"The issues on the table are macro issues. With what's going on now — the great waves of ma-

*Continued on page 83*

# *Harvard commits to 3rd energy deal*

**By Fred Williams**

CAMBRIDGE, Mass. — The Harvard University endowment, with about $3.5 billion in assets, has made its third major oil and gas investment since undertaking a direct-market approach last December.

Harvard will participate in a $15 million developmental drilling joint venture through Aneas Venture Corp., the investment affiliate of Harvard University, along with Harken Oil & Gas Inc., Dallas, and George Soros, president of Soros Fund Management, New York.

A spokesman for Harken declined to reveal the lead investor in the deal or the amount each partner will invest.

Harvard officials could not be reached at press time.

Both Aneas and Mr. Soros are Harken shareholders and two Harvard Management Co. officers, Michael Eisenson and Donald D. Beane, sit on Harken's board of directors.

According to the Harken spokesman, the joint venture will permit Harken to drill up to 50 wells during the next three years. The wells will be drilled primarily on natural gas prospects on undeveloped leases and acreage operated or owned by Harken.

Harvard has a continuing oil and gas investment program through Aneas and made its first direct oil and gas deal late in 1986 when it decided to put $20 million of its assets into an acquisition program, also with Harken (*Pensions & Investment Age*, Dec. 8). That two-year program calls for separately negotiated acquisitions of oil and gas reserves and investments in energy-related companies.

Later in December, Harken announced the closing of the acquisition of Kennedy and Mitchell Inc. a privately held, independent oil and gas company based in Denver by KMI Acquisition Co.

KMI Acquisition is owned 49% by Harken and 51% by Aneas. KMI is an oil and gas exploration and production company with approximately $20 million in assets.

In April, Harvard became the lead investor in a $145 million offshore oil and gas exploration venture known as Smith Offshore Exploration Co. (*P&I Age*, April 20). ■

**Third quarter performance in the brokerage industry**

| | Revenues | | Net income | | Earnings per share | |
|---|---|---|---|---|---|---|
| | 1987 | 1986 | 1987 | 1986 | 1987 | 1986 |
| Bear Stearns Cos.* | 482.7 | 334.1 | 47.9 | 18.9 | .53 | .22 |
| First Boston | 369.6 | 263.2 | 40.8 | 27.1 | 1.15 | .76 |
| E.F. Hutton | 988.9 | 674.5 | 8.7 | 8.2 | .26 | .26 |
| Merrill Lynch | 3,023.0 | 2,234.0 | 195.1 | 93.7 | 1.72 | .86 |
| Morgan Stanley | 851.9 | 554.3 | 72.9 | 39.5 | 2.82 | 1.57 |
| PaineWebber | 628.6 | 605.6 | 14.8 | 21.1 | .44 | .71 |
| L.F. Rothschild | 146.9 | 74.8 | −6.3 | −5.4 | −.42 | −.32 |
| Shearson Lehman Brothers | 1,300.0 | 1,100.0 | 51.0 | 65.0 | .51 | ** |
| Salomon | 1,559.0 | 1,600.0 | 27.0 | 128.0 | .18 | .82 |

* for period ended July 1, 1987 and July 25, 1986
** Shearson Lehman was not a public company in 1986
Source: Third quarter earnings statements

# Morgan Stanley on top

**By Brad Rudin**

Morgan Stanley Group Inc. outpaced its publicly owned rivals on Wall Street with third-quarter earnings results that mark a bright spot in what proved to be a trying quarter for some brokerage firms.

The list of firms that were unable to cope satisfactorily with volatile markets is likely to grow as a result of the Oct. 19 stock market crash, analysts said in comments about prospects for the fourth quarter.

Brenda McCoy, the brokerage analyst at PaineWebber Inc., said the 15% to 20% decline in 1987 earnings she had predicted for the brokerage industry will be revised to reflect the industry's more bearish prospects.

Although the industry took a hard blow from the stock market crash, brokerage firms still possess considerable financial strength.

"The rated brokers have met their funding requirements without interruption," Standard & Poor's Corp. said in its Credit Week publication. "The ability to fund during these difficult times demonstrates the markets' confidence in the largest brokerage firms."

Brokerage firms rated by S&P suffered losses from risk arbitrage, equity inventory positions and counterparty failure, but not enough to impair their capital, the rating agency said.

"None of the firms determine their own fate," said John Keefe, the brokerage analyst at Drexel Burnham Lambert Inc. "Some are more nimble than others, but sooner or later their fate is determined by the markets."

PaineWebber Group Inc., L.F. Rothschild Holdings Inc. and Salomon Inc. all turned in

*Continued on page 82*

The *P&I Age* monthly indexes track the changes in the Standard & Poor's 500, Frank Russell Co.'s Russell 3000 stock index, the Ryan Index of fixed-income securities, the Shearson Lehman Government/Corporate bond index and the Salomon Brothers Broad Investment Grade bond index.

***P&I Age* October indexes**

| | Latest mo. | Year to-date | Trailing 12 mos. |
|---|---|---|---|
| S&P 500 | −21.56 | 6.60 | 6.41 |
| Russell 3000 | −22.43 | 2.66 | 2.69 |
| Ryan Index | 4.67 | −0.90 | 0.11 |
| Shearson Lehman Gov't./Corp. | 3.75 | 0.29 | 1.88 |
| Salomon BIG | 2.87 | −0.24 | 1.61 |

Source: Rogers, Casey and Barksdale Inc., and Frank Russell

**Because of a calculation error, incorrect data were supplied to *Pensions & Investment Age* for the Salomon BIG index for August and September. The correct figures are:**
- **Year-to-date ended Aug. 31: −0.85.**
- **12 months ended Aug. 31: 1.42**
- **Year-to-date ended Sept. 30: −3.02**
- **12 months ended Sept. 30: 0.20.**

**The one-month figures were correct.**

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Vol. 15, No. 24 — Pensions & Investment Age (ISSN 0273-5466) is published every other Monday at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1987.

# Consultants

## Execs place trust in 'buddy system'

By Anne E. Schwimmer

Getting recommendations from colleagues appears to be the first step of many pension fund executives in hiring consultants.

In addition to word of mouth, the executives also use published directories and the firms whose representatives have knocked on their doors in compiling their first list of choices.

Once they get that input and narrow the list, the fund executives concentrate on choosing a consultant that meets numerous criteria ranging from experience to fees.

"We talked to people in the real estate business and to people in the pension fund business. Certain names came up and we checked them out," said DeWitt Bowman, chief investment officer at the $3 billion City & County of San Francisco Employees Retirement System.

The fund hired Pension Realty Advisors, San Francisco, earlier this year (*Pensions & Investment Age*, June 15).

Before Tom Vanneman, financial manager of the $216 million Alexander & Alexander Inc., Baltimore, pension plan, selects a consultant, he talks to other consultants "to see what they have vs. what we are getting."

The company uses SEI Funds Evaluation Services, Wayne, Pa., as a consultant. Mr. Vanneman periodically checks others, but he doesn't have to look very hard to find them: "We rely on them to contact us. They are usually very good at that."

Alexander & Alexander uses several criteria in evaluating consultants.

Mr. Vanneman said the consultant should have a "pro-active approach to pension consulting," which he defined as a willingness to actively seek him out with information and advice.

He also emphasized the importance of timely research on complex topics like pension insurance. In choosing a consultant, Mr. Vanneman added, the workload of the account representative is also an important factor, because he wants to be sure enough time will be devoted to his company's interests.

*San Francisco's DeWitt Bowman asked other professionals for recommendations.*

Nancy Wellhousen, the city treasurer who oversees the $65 million Oklahoma City Employee Retirement System, said she called on industry colleagues for input before hiring Fiduciary Capital Advisors Inc., Westfield, N.J., in 1986.

"We called the state pension system and the city of Tulsa and got recommendations from them," she said.

"Then we called the three they used and interviewed them."

Officials at the $470 million Jacksonville (Fla.) City Retirement System, referred to a list of consultants who had called on them in the past and on the Money Market Directory of Pension Funds, said Richard Cohee, city treasurer.

"We mailed out requests for

*Continued on page 59*

## Consultants add value to go with data

By Fred Williams

With performance data easily available from their master trustee or custodian, pension executives expect their consultants to add value and depth through their evaluation services.

Performance measurement services have become ubiquitous among pension consultants; virtually every firm listed in the *Pensions & Investment Age* directory offers various levels of assessment as part of a range of consulting services.

While many claim their services are unique, one of the usual differences is in the level of additional support that goes with the numbers.

Southwestern Bell Corp., St. Louis, has used Buck Pension Fund Services, New York, since the regional telephone operating company was established in 1984.

Roger Wohlert, assistant treasurer-corporate finance, said he depends more on the performance evaluation services of the $6.5 billion fund's master trustee, First Republic-Bank Dallas, than on Buck.

"We rely on the performance evaluation and calculations with First Republic and we use Buck to test the reasonableness of the data. They (Buck) get the information at the same time and they have their own universe. We compare our managers against the indexes and TUCS (Trust Universe Comparison Service) and against Buck's universe. The Buck universe is smaller, but we feel it is of a higher quality of managers because it includes managers they would recommend. If our managers are doing well against them, then it is probably a good sign because they have already passed some screens with Buck," said Mr. Wohlert.

James Baker, executive secretary of the $202 million Kansas City (Mo.) Public School Retirement System, said his fund was seeking a performance measurement service when it hired William M. Mercer-Meidinger-Hansen Inc., Louisville, Ky., two years ago. It now uses the firm's full consulting service.

"We find it is necessary to protect us fiduciarily. It helps us show that we have made valid investment decisions and indicates to us our bogies and cumulative situation with our investments. We need to look at our managers and make sure they are doing what they said."

"We could get the performance evaluation information from our custodian bank . . . any large custodial operation can do similar things (as a consultant), but the key thing is do they draw on others to compare with. Custodians won't give opinions or advice. For advice you go to a consultant; for numbers you can go to the bank."

A spokesman at DeMarche Associates, Kansas City, Mo., said the firm's performance evaluation work "goes much deeper than simply compiling performance numbers as trustees do. We audit all performance data. We look at why and how the results were achieved. It is a matter of dissecting all the transactions and looking at the individual securities bought and sold."

*Roger Wohlert uses a consultant to get a clue on how Southwestern Bell's managers compare with others.*

Performance results are reviewed and audited at least quarterly, he said, from data taken from trustee and custodian records.

"From that we develop our own performance numbers. Every transaction is traced and matched as of the trade date. It is a total recreation of each period, everything is recalculated and audited," the DeMarche spokesman said.

While the larger pension consultants such as Hewitt Associates, SEI, Wilshire Associates, Frank Russell Co. and Mercer-Meidinger-Hansen still dominate the performance evaluation market, smaller consultants believe their services are equal to those provided by big companies.

Small and midsize consultants see their services as more flexible and more easily customized to the client's needs.

Richard Holbein, president of Richard Holbein & Associates, Dallas, unlike many consultants, offers performance mea-

*Continued on page 59*

## IMCA keying on professionalism

By Anne E. Schwimmer

DENVER — Professionalism is serious business to the Investment Management Consultants Association, and the group is doing something about it.

The association, which was started in 1985 by eight professionals and now boasts 265 members, will celebrate its second anniversary Thanksgiving Day.

To promote professionalism among consultants and other professionals serving small and midsize accounts, the IMCA will hold its first certification course in April at the University of Pennsylvania's Wharton Business School, Philadelphia.

Still to come is a major attempt to standardize performance reporting standards of money managers. The IMCA is having difficulty rallying support for the idea in the industry, despite the backing of some money managers.

The stock market's volatility, however, may boost the group's cause. "The current difficult time is going to bring out all the problems," said George A. Dunn, immediate past president of IMCA and vice president of EF Hutton & Co. Inc., Washington.

The certification program tells clients IMCA members have a certain amount of training, knowledge and experience, said James P. Owen, executive vice president of IMCA and managing director of NWQ Investment Management Co., Los Angeles.

The weeklong program, the first session of which already is overbooked, will be repeated two or three times a year, said Hal Rossen, president of the IMCA and senior vice president of the investment management consulting services department of Prudential-Bache Securities, Detroit.

In addition to improving professionalism in the industry, the IMCA's goals are to educate executives of midsize funds ranging from $1 million to $50 million, on the help available to them from investment management consultants and to promote and protect the interests of the profession, said Mr. Owen.

The non-profit organization's membership includes money managers, consultants, certified public accountants, attorneys and others who serve middle market accounts.

*James Owen, executive vice president; George A. Dunn, past president; and Hal Rossen, president, all see a bright future for the Investment Management Consultants Association.*

As part of its educational efforts, the IMCA runs a yearly conference on issues facing the industry. "It's a real nuts-and-bolts type of conference," said Mr. Dunn. This year's conference will be held in Palm Beach, Fla. April 7-10. Topics to be covered include asset allocation and matching management styles with investment objectives, he said.

Mr. Owen said IMCA is mostly involved with middle-market accounts, which often do not have the resources or time to create an in-house staff such as those used by larger funds to deal with the problems of fund management.

Midsize accounts, he said, need consultants to aid them in the process of choosing managers, setting goals and objectives for the fund and tracking the fund's performance.

"The midmarket account," said Mr. Dunn, "needs someone to write out investment objectives and to supply a third-party analysis of how those objectives are being met. Eighty percent of midmarket accounts do not have a written set of objectives."

In addition, he said, such accounts do not have access on their own to the sophisticated data bases large funds use. These could be made available to them through their consultant.

"The objectives and investment goals of midmarket accounts are quite different from those of larger plan sponsors," said Mr. Owen. The larger plan sponsors want to "outperform the S&P and are willing to assume greater-than-market risk," he said. Smaller sponsors, however "are not out to beat the market," Mr. Owen said.

"They are seeking to earn a greater average constant return in order to beat inflation. The preservation of capital is upper most in their minds," he said.

# Unregistered advisers used by few

By Trudy Ring

Some consultants, both in separate account arrangements and pooled manager-of-managers funds, have placed client money with investment advisers not registered with the Securities and Exchange Commission.

They usually have not done so for pension funds covered by the Employee Retirement Income Security Act. Under ERISA, fund sponsors and trustees cannot pass fiduciary responsibility to an unregistered manager. However, these consultants said unregistered managers have provided good performance and varied investment styles for non-ERISA funds, endowments and foundations.

Yet other consultants said with the ease of registration, there is no good reason for advisers not to register and thus, no reason to use unregistered managers.

Evaluation Associates Inc., Westport, Conn., has used unregistered investment partnerships for some clients, said Keith L. Stransky, vice president. These clients represented a mixture of tax-exempt and taxable accounts, but do not include ERISA funds, he said.

He declined to name the clients or advisers or state the amount of money involved. Evaluation Associates does not use unregistered advisers in its pooled fund, but does in separate accounts for which the firm acts as a manager of managers, he said.

Unregistered managers have some advantages, Mr. Stransky said.

"One of the positives is that these managers have a large part of their net worth in the same partnerships as the clients," he said. Also, unregistered advisers can do some things registered managers can't do, such as shorting securities or buying commodities.

A disadvantage is that unregistered managers tend to be very private and unenthusiastic about disclosing investment performance results or other data, Mr. Stransky said. However, Evaluation Associates has persuaded the advisers it has used to release this information.

Clients using these investment partnerships have had to sort through complicated agreements, usually about 50 pages long, he said. "You need a lawyer, really, to read a partnership agreement," he said.

In the arrangements it has made for using unregistered advisers, Evaluation Associates has not assumed fiduciary liability. It has monitored advisers for the clients, Mr. Stransky said.

The firm hasn't gotten to the point of deciding whether it would recommend use of unregistered advisers for ERISA clients.

"I would say that you have to have a sophisticated investor to use unregistered advisers," Mr. Stransky added.

Collins Associates, Newport Beach, Calif., has used a few unregistered advisers in its pooled manager-of-manager funds, said Budge Collins, president. He said he did not use the unregistered managers for ERISA funds, but for foundations. He declined to name clients or advisers.

He said he believes unregistered managers often are better than registered ones. Like Mr. Stransky, he noted they can go short in the stock market. Also, Mr. Collins said, unregistered advisers often have extremely low transaction costs.

Clients haven't objected to the use of unregistered managers, he said. "They love them," he said. "Performance has been truly outstanding," though he declined to release any figures.

He said he monitors about 50 unregistered advisers; of these, he has used six. They are primarily equity managers, he said.

Mr. Collins said these managers are fiduciaries, but in these arrangements Collins Associates also takes on fiduciary responsibility as a registered investment adviser.

Berg Fiduciary Consultants, Port Chester, N.Y., got an ERISA client together with an unregistered manager just once, about five years ago, said Paul E. Berg, president. It was done only because the manager operated on a performance-based fee schedule, which at the time wasn't allowed for registered advisers.

The arrangement involved an exhaustive legal review, Mr. Berg said. The conclusion was there was little risk to the fund in using an unregistered adviser, as the adviser was assigned just $1 million of the client's $100 million pension fund, he said.

"Other than that one instance, we would never use an unregistered adviser for an ERISA account," Mr. Berg said. He said he would have the same reaction for endowment and foundation money.

"It's so easy to register," he said. "There's really no excuse not to get registered." He noted the SEC now allows performance-based fees, so the one obstacle to registration of the adviser he used is gone.

Mr. Berg said he couldn't recall the name of the adviser, which had about $20 million under management and specialized in small-capitalization stocks in high-technology companies that were just beyond the initial public offering stage. He declined to name the client that used the manager.

Other consultants also voiced reservations about use of unregistered advisers.

"In the traditional equity and fixed-income areas, you can find a registered investment adviser to give you what you want," said S.A. "Sandy" Lincoln, managing director of William M. Mercer-Meidinger-Hansen Inc., Deerfield, Ill.

To his knowledge, none of his clients ever has hired unregistered managers as a result of Mercer-Meidinger-Hansen searches, but some such firms might have been included in the searches. From time to time, clients may want a specific unregistered investment firm to be included in a search, Mr. Lincoln said.

He added that a manager's being registered doesn't excuse consultants and pension executives from doing due diligence on that manager. "I don't look at the SEC registration as a necessary and sufficient protection," he said. ■

For reprints of articles appearing in *Pensions & Investment Age*, contact Ulla Rodriguez at *P&I Age*, 220 E. 42nd St., New York, N.Y. 10017; (212) 210-0124

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*The person you talk to owns the company.*

The information contained in the following profiles was developed by *Pensions & Investment Age* from answers to questionnaires.

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# a

### The Alexander Consulting Group Ltd.

*20 Bay St., Suite 1900, Toronto, Ontario M5J 2N9; (416) 868-5501*

The Alexander Consulting Group Ltd. provides development of investment policies, investment objectives and asset allocation and Canadian manager evaluation, selection, performance measurement and investment performance analysis.

The firm provides the following to the investment management industry: analysis of investment, contribution and benefit risks; selection of trustees and administrative services; development of funding policy; computer simulations; and cash flow projections.

The firm has special expertise in actuarial services, employee benefits, executive compensation, job evaluation and employee communication.

It has 130 retainer clients and 90 professional consultants. Fees are payable in hard dollars.

Nancy Stewart, corporate manager-public affairs and research, is client contact.

### HB Aschwald & Associates

*P.O. Box 66, Corte Madera, Calif. 94925; (415) 924-1222*

HB Aschwald & Associates provides development of investment policies and objectives and asset allocation; U.S. manager evaluation, selection and performance measurement; and analysis of U.S. investment risk levels.

The firm has special expertise in U.S. manager selection and evaluation, primarily in California.

The firm provided services to 45 non-retainer clients during the past year, including 14 corporate and 31 public clients.

There are three professional consultants. Fees are payable in soft dollars.

The firm also offers transaction and trading desk execution.

Howard Aschwald, managing partner, is client contact.

# b

### B of A Pension Consulting Services

*315 Montgomery St., Suite 1610, San Francisco, Calif. 94104; (415) 622-8254*

B of A Pension Consulting Services, a subsidiary of Bank of America, provides development of investment policies and objectives and asset allocation; U.S. manager evaluation, selection; and U.S. investment performance measurement and analysis.

The firm has special expertise in manager selection and performance measurement.

The firm provided services to 20 non-retainer clients in the past year, of which 16 were corporate and four, union.

There are three professional consultants. Fees are paid in hard dollars.

Peggy L. Newton, vice president, is client contact.

### BARRA

*1995 University Ave., Suite 400, Berkeley, Calif. 94704; (415) 548-5442*

BARRA provides development of investment policies and objectives and asset allocation; U.S. and foreign performance measurement; and analysis of U.S. and foreign investment performance.

The firm also provides portfolio risk analysis and optimization, both U.S. and foreign; asset allocation tools; currency risk modeling; multiple manager analysis and optimization; normal portfolio construction; fulfillment fund construction; customized risk and valuation models; and specialized consulting.

The firm offers U.S. and international equity and fixed-income analyses and options and futures tools to the investment management industry.

It has special expertise in quantitative investment methods.

It has more than 200 retainer clients, seven of which are public.

There are 60 professional consultants. Fees are payable in hard and soft dollars.

Barbara Hodges, manager of marketing communications, is client contact.

### Bateman Eichler, Hill Richards Inc. Consulting Group

*700 S. Flower St., Suite 2700, Los Angeles, Calif. 90017; (213) 683-3979*

Bateman Eichler, Hill Richards Inc. Consulting Group, a subsidiary of The Kemper Group, provides development of investment policies and objectives and asset allocation; U.S. and foreign manager evaluation and selection; U.S. and foreign investment performance measurement; and analysis of U.S. and foreign investment performance.

The firm provides performance measurement services to the investment management industry.

The firm has special expertise in U.S. and foreign multimanager analysis.

Of the 145 retainer clients, 140 are corporate, two are public and three are union. The firm also provided services to 15 non-retainer clients during the past year, of which 14 were corporate and one, union.

There are six professional consultants. Fees are payable in hard and soft dollars.

Steven W. Arnold, vice president, is client contact.

### Beam & Associates

*12813 E. Paul, Clovis, Calif. 93612; (209) 299-4152 or (213) 625-1611*

Beam & Associates, a subsidiary of Morgan, Olmstead, Kennedy & Gardner, offers development of investment policies and objectives and asset allocation; U.S. and foreign manager evaluation and selection; U.S. and foreign performance measurement; and analysis of U.S. and foreign investment performance. The firm also provides comparison of results to requirements of policies and objectives.

The firm has special expertise in equity and debt buys and sells vs. stated methodologies.

There are 15 retainer clients and five non-retainer clients.

There is one professional consultant. Fees are payable in soft dollars.

Ed Beam, vice president, is client contact.

### Becker, Burke Associates

*221 N. LaSalle St., Suite 1000, Chicago, Ill. 60601; (312) 782-5665*

Becker, Burke Associates provides development of investment policies and objectives and asset allocation; U.S. and foreign manager evaluation and selection; U.S. and foreign performance measurement; and analysis of U.S. and foreign investment performance.

The firm also provides performance fee consulting, South Africa divesting studies, master trust searches and Customized Performance Standards.

The firm provides evaluation and Customized Performance Standards to the investment management industry.

The firm has special expertise in investment policy analysis, Customized Performance Standards, designing asset manager configurations and per-


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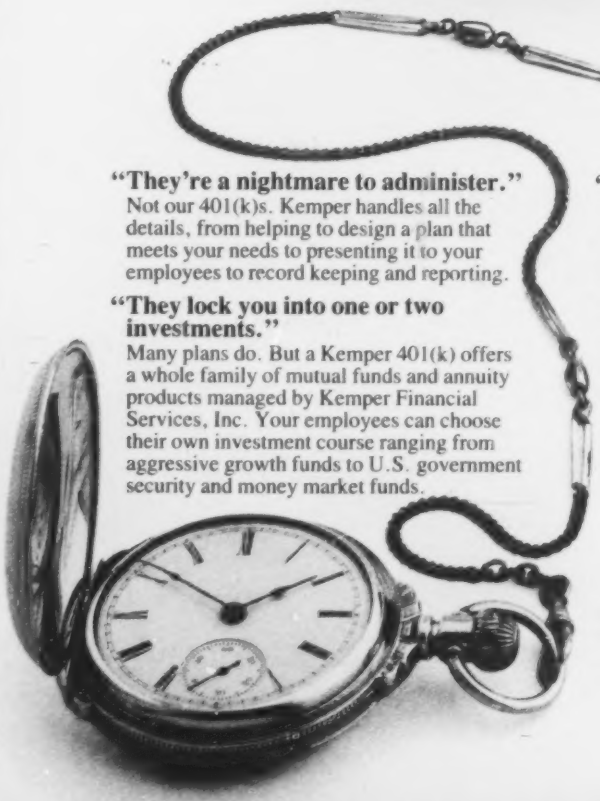

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formance evaluation.

Of the 20 retainer clients, 13 are corporate and four are public. The firm also provided services to 10 non-retainer clients during the past year, including four corporate, two public and one union.

There are four professional consultants. Fees are payable in hard and soft dollars.

Clients include the Municipal Employees' Annuity and Benefit Fund of Chicago, Nalco Chemical, Laborers and Retirement Board Employees' Annuity Fund of Chicago and Health Care Services Corp.

Edmund M. Burke, Howard Pohl and Ronald Surz, principals, are client contacts.

### Berg Fiduciary Consultants

*363 Westchester Ave., Port Chester, N.Y. 10573; (914) 937-7111*

Berg Fiduciary Consultants Inc., which is affiliated with Plan Sponsor Network, offers development of investment policies and objectives and asset allocation; U.S. and foreign manager evaluation and selection; U.S. and foreign investment performance measurement; and analysis of U.S. investment performance. The firm also offers GIC contract negotiations and real estate manager searches.

The firm maintains an on-line investment manager data base of 500 U.S. managers and 75 international/global managers.

Of the 13 retainer clients, nine are corporate, one is public and three are union. The firm provided services to three non-retainer clients during the past year, two corporate and one union.

There are four professional consultants. Fees are payable in hard and soft dollars.

Clients include the American Society of Civil Engineers, Continental Airlines, Insilco Corp. and the UFCW, Southern Region.

Paul E. Berg, president, is client contact.

### Berla Investment Consulting

*1327 N. Main St., Suite 107, Walnut Creek, Calif. 94596; (415) 947-0326*

Berla Investment Consulting provides development of investment policies and objectives and asset allocation; U.S. and foreign manager evaluation, selection and performance measurement and analysis of U.S. and foreign investment performance.

The firm has special expertise in investment performance measurement and analysis.

Of the 23 retainer clients, 18 are corporate, four are public and one is union. The firm also provided services to five non-retainer clients in the past year: two corporate, two public and one union.

There is one professional consultant. Fees are payable in hard dollars.

Clients include Mount Diablo Medical Center, Valley Memorial Hospital, Santa Barbara Savings & Loan and Delta Memorial Hospital.

George A. Berla, president, is client contact.

### Alan D. Biller & Associates

*P.O. Box 879, Palo Alto, Calif. 94302; (415) 328-7283*

Alan D. Biller & Associates Inc. provides development of investment policies and objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. performance measurement. It provides on-going consulting services to pension plans dealing with all investment-related issues.

The firm provides PensionOptions, an asset/liability/cash flow optimization software program, to the investment management industry.

There is one retainer client, a union. The firm provided services to four non-retainer clients in the past year, three corporate and one union client.

There are three professional consultants. Fees are paid in hard dollars.

Clients include the Western Conference of Teamsters Pension Trust.

Alan Biller, president, is client contact.

### Boettcher & Co. Inc.

*828 17th St., Denver, Colo. 80202; (303) 628-8000*

Boettcher & Co. Inc., a subsidiary of Kemper Financial Services, provides development of investment policies and objectives and asset allocation; U.S. and foreign manager evaluation and selection; U.S. and foreign performance measurement; and analysis of U.S. and foreign investment performance.

The firm has special expertise in risk evaluation and measurement.

Of the 330 retainer clients, 112 are corporate, 12 are public and three are union.

There are 12 professional consultants. Fees are payable in hard and soft dollars.

Clients include Tlingit-Haida, University of Wyoming, City of Wheatridge Police & Fire and Blue Cross/Blue Shield.

Michael Bunn, vice president, director-investment management group, is client contact.

### BT Consulting

*280 Park Ave., New York, N.Y. 10015; (212) 850-4295*

BT Consulting, a subsidiary of Bankers Trust Co., provides development of investment policies and objectives and asset allocation; and U.S. and foreign investment performance measurement and investment performance analysis.

The firm offers performance analysis, risk analysis and performance attribution to the investment management industry.

It has special expertise in asset allocation, performance measurement, risk analysis and performance attribution.

There are 74 retainer clients.

There are six professional consultants. Fees are payable in hard and soft dollars.

Clients include Bechtel, Hershey Foods, Lockheed and Shell Oil.

Howard M. Crane, vice president, is client contact.

### Buck Pension Fund Services

*2 Pennsylvania Plaza, New York, N.Y. 10121; (212) 330-1000*

Buck Pension Fund Services, a subsidiary of Buck Consultants Inc., offers development of investment policies and objectives and asset allocation; U.S. and foreign manager selection and evaluation; U.S. and foreign investment performance measurement; and analysis of U.S. investment performance.

The firm also offers real estate consulting, including asset allocation and manager evaluation and selection; annuity purchases and other insurance company investment products; and venture capital.

The firm has special expertise in integrated asset/liability modeling and performance relative to benchmark portfolios.

There are 25 retainer clients: 20 corporate, four public and one union. The firm also provided services to 15 non-retainer clients during the past year, 14 corporate and one union.

There are eight professional consultants. Fees are payable in hard and soft dollars.

Clients include Southwestern Bell, the State of Connecticut and Sara Lee.

Catherine A. Higgins, president, is client contact.

### Butcher Consulting Group

*2500 Grant Building, Pittsburgh, Pa. 15219; (412) 232-1000*

Butcher Consulting Group, a subsidiary of Butcher & Singer Inc., provides development of investment policies and objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign investment performance measurement and analysis.

The firm also provides consultation on short-term cash funds or funds that require a high degree of liquidity.

It has special expertise in midsize funds of $5 million to $150 million; non-profit organizations, particularly hospitals; manager selection; microcomputer graphics and statistical data bases; and the CFO Advisory, in which the firm will accept any sophisticated assignment for a large corporate chief financial officer or serve as the CFO for a smaller corporation on a time-sharing basis. The CFO Advisory uses Decision Support Systems simulation software.

The firm offers its portfolio classification and ranking data base — Graphical Ranking of Investment Descriptors (G.R.I.D.) — to the investment management industry.

Of the 68 retainer clients, 31 are corporate, four are public, five are union, and 28 are non-profit. The firm also provided services to 19 non-retainer clients during the past year: 13 corporate, one public, three union and two non-profit.

There are 10 professional consultants. Fees are payable in hard and soft dollars.

Clients include Coopers & Lybrand, City of Pittsburgh, Duquesne Light Co. and Fairfax County.

Terry Bilkey and James E. Yanni, senior vice presidents, are client contacts.

### Callan Associates Inc.

*71 Stevenson St., Suite 1300, San Francisco, Calif. 94105; (415) 974-5060*

Callan Associates Inc. provides development of investment polices and objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign investment performance measurement and analysis.

The firm also offers software planning tools for personal computers, including liability simulation, asset optimization, performance statistical analysis, data base management and asset projections; and educational services, such as institute programs, staff training, customized research and attitude surveys, monthly and quarterly statistical performance data, investment market reviews and investment management strategy projections.

The firm provides the following to the investment management industry: investment process analysis; portfolio monitoring services; manage style analysis; trading cost analysis; investment measurement service; performance attribution analysis; presentation consulting; and special projects.

The firm has special expertise in strategic planning services, portfolio audits, execution analysis and educational services.

Of the 156 retainer clients, 60 are corporate, 28 are public and 25 are union. The firm also provided services to 190 non-retainer clients during the past year, of which 30 were corporate, 12 public and nine union.

There are 27 professional consultants. Fees are payable in hard and soft dollars.

Ronald D. Peyton, president, is client contact.

### Canal Forest Resources Inc.

*9401 ArrowPoint Blvd., Suite 260, Charlotte, N.C. 28217; (704) 527-6780*

Canal Forest Resources Inc., a subsidiary of Canal Industries Inc., provides development of investment policies and objectives for timberland


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investments; U.S. timberland manager evaluation and selection; and analysis of U.S. timberland investment performance.

The firm also provides timberland consulting and active property management services to the investment management industry.

It has special expertise in Southern timberland management, appraisals, acquisitions and sales.

There is one corporate retainer client. The firm also provided services to three corporate non-retainer clients during the past year.

There are three professional consultants. Fees are payable in hard dollars.

C.E. "Ted" Bush III, president, is client contact.

### The Capital Control Group

*108 Wilmot Road, Suite 220, Deerfield, Ill. 60015; (312) 940-4901*

The Capital Control Group Ltd. provides development of investment policies and objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

The firm also provides hands-on assistance in the use of proper methodologies to establish goals and objectives, manager searches, monitoring and implementation.

The firm also provides brokerage and performance monitoring to the investment management industry.

The firm has special expertise in Taft-Hartley plans and maximization of returns while minimizing liabilities.

There are 35 retainer clients, 30 corporate and five union. The firm has provided services to 50 non-retainer clients in the past year, including 20 corporate and 10 union.

There are three professional consultants. Fees are paid in soft dollars.

Clients include Local 219 Plumbers and Pipefitters, Akron, Ohio, and Local 436 Teamsters, Cleveland.

Jay B. Rosen, president, is client contact.

### Capital Management Sciences

*10920 Wilshire Blvd., Suite 1203, Los Angeles, Calif. 90024; (213) 824-9715*

Capital Management Sciences provides fixed-income and asset allocation software for immunization, indexation, cash matching, FASB, security valuation and structured management.

There are 126 clients. There are eight professional consultants. Fees are payable in hard and soft dollars.

Clients include Bankers Trust, Putnam Fixed Income, Chase Investors and TCW.

Laurie S. Adami, senior vice president, is client contact.

### Capital Trust Co.

*4380 S.W. Macadam Ave., Suite 450, Portland, Ore. 97201; (503) 228-2300*

Capital Trust Co. provides development of investment policies and objectives and asset allocation; U.S. and foreign manager evaluation and selection; U.S. and foreign investment performance measurement; and analysis of U.S. investment performance. The firm also assists in the evaluation of custody, cash management and security lending options; evaluates non-traditional asset categories; and provides written analysis of special investment topics.

The firm has special expertise in setting investment objectives and policies; strategic allocation of funds among traditional and non-traditional asset classes; development of tactical asset allocation strategies on a retainer basis; and working with private asset bases, such as family groups, foundations and endowments.

Of the more than 17 clients on retainer, seven are corporate and one is public. The firm also provided services to more than eight non-retainer clients, including three corporate and one public.

There are five professional consultants. Fees are payable in hard and soft dollars.

As trustee, the firm offers seven pooled investment funds to small and midsize pension portfolios. It selects and monitors outside managers for the pooled funds and provides asset allocation strategies to the fund participants.

Clients include Colorado Public Employees, Pay Less Drug Stores and Pacific Power & Light.

Ralph C. Rittenour Jr., president, is client contact.

### The Carmack Group Inc.

*201 S. Lake Ave., Pasadena, Calif. 91101; (818) 449-0721*

The Carmack Group Inc. provides development of investment policies and objectives and asset allocation; U.S. and foreign manager evaluation and selection; U.S. and foreign investment performance measurement; and analysis of U.S. investment performance. The firm also provides a

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graphics analysis system that is tailored to each portfolio.

The firm has special expertise in performance analysis and attribution.

It has 12 retainer clients, all corporate. The firm provided services to 11 non-retainer clients last year, including seven corporations.

There are 16 professional consultants. Fees are payable in hard and soft dollars.

Clients include Loyola Marymount University, Lear Siegler and Forstmann Little.

James A. Carmack, president, is client contact.

### C&B Consulting Group

*231 S. Bemiston, St. Louis, Mo. 63105; (314) 725-0114*

C&B Consulting Group, a subsidiary of Corroon & Black Corp., provides development of investment policies and objectives and asset allocation; and U.S. manager evaluation and selection and performance measurement. The firm also provides GIC selection.

It has special expertise in actuarial/asset/liability analysis.

There are four professional consultants. Fees are payable in hard dollars.

J. Reuben Rigel, senior vice president, is client contact.

### CDA Investment Technologies Inc.

*11501 Georgia Ave., Silver Spring, Md. 20902; (301) 942-1700*

CDA Investment Technologies Inc. provides development of asset allocation; U.S. manager evaluation and selection; measurement and analysis of U.S. investment performance; and analysis of manager style.

The firm has special expertise in online and personal computer systems and offers performance measurement and universe comparisons with color graphics.

There are more than 2,000 non-retainer clients, including 700 employee benefits sponsors.

There are six professional consultants. Fees are payable in hard and soft dollars.

John Lewis, director of marketing, is client contact.

### Collins Associates

*840 Newport Center Drive, Suite 660, Newport Beach, Calif. 92660; (714) 644-5771*

Collins Associates provides development of investment policies and objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign investment performance measurement and analysis.

The firm also manages a portfolio of 60 investment managers for 20 clients whose assets total approximately $33 billion. Six of the relationships are discretionary; 14 are advisory.

Of the 20 retainer clients, 16 are corporate.

There are seven professional consultants. Fees are payable in hard dollars.

Clients include Atlantic Richfield, FMC, Champion Spark Plug and Safeway Stores.

Budge Collins, president, is client contact.

### Colonial Consulting Corp.

*610 Fifth Ave., Suite 420, New York, N.Y. 10020; (212) 307-1830*

Colonial Consulting Corp. Inc. provides development of policies and objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign investment performance measurement and analysis. It also provides selection and evaluation of custody services.

The firm offers its endowment and foundation data base/index performance snapshot to the investment management industry.

It has special expertise in performance measurement.

Of the 10 retainer clients, one is corporate.

There are two professional consultants. Fees are payable in hard and soft dollars.

John K. Goodrich, president, is client contact.

### Curuby & Co.

*Hanawa Bldg., No. 808, 1-17-11 Otowa, Bunkyo-ku, Tokyo 112, Japan; 03-942-2607*

Curuby & Co. focuses on assisting senior executives of investment management firms in developing and implementing their business plans regarding Japanese assets.

There are seven corporate retainer clients. The firm also provided services to five corporate non-retainer clients during the past year.

There are two professional consultants. Fees are payable in soft and hard yen.

George Curuby, principal, is client contact.

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### Davies Investment Associates Inc.

*P.O. Drawer 56246, Atlanta, Ga. 30343; (404) 525-7541*

Davies Investment Associates Inc. provides development of investment policies and objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign investment performance measurement and analysis.

It provides services as requested to the investment management industry.

Of the 10 retainer clients, five are corporate and five are public. The firm provided services to 15 non-retainer clients in the past year, including seven corporate, seven public and one union.

There is one professional consultant. Of its fees, 95% are paid in hard dollars and 5% in soft dollars.

Clients include the cities of Wichita and Sioux Falls.

James J. Davies, investment consultant, is client contact.

### DeMarche Associates

*1900 W. 47th Place, Suite 314, Westwood, Kan. 66205; and P.O. Box 7027, Kansas City, Mo. 64113; (913) 384-4994*

DeMarche Associates provides development of investment policies and objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign investment performance measurement and analysis.

The firm also offers fund transaction audits; real estate manager searches and ongoing performance measurement and evaluation; program sales; assistance with portfolio protection; techniques such as portfolio insurance, hedging, futures and options, GICs, dedicated or immunized portfolios and benchmark indexes.

The firm provides DeMarche Strategy Service, DeMarch Style Code Rating Service and Benchmark Indexes to the investment management industry.

The firm has special expertise in interpreting the market and manager styles and performance.

Of the 100 retainer clients, 53 are corporate, 22 public, four union and 21 foundation or endowment funds. The firm also provided services to 10 non-retainer clients during the past year — seven corporate and three public.

There are 15 professional consultants. Fees are payable in hard and soft dollars.

Clients include Quaker Oats, Inland Steel, Control Data and Outboard Marine.

Samuel T. DeKinder, executive vice president, is client contact.

### Dorn & Helliesen Inc.

*300 Tamal Plaza, Suite 270, Corte Madera, Calif. 94925; (208) 344-9200 and (415) 924-1200*

Dorn & Helliesen Inc. provides development of investment policies and objectives and asset allocation; U.S. and foreign manager evaluation and selection; and analysis of U.S. investment performance. U.S. performance measurement is provided through an affiliate.

Of the 13 retainer clients, nine are corporate, three are public and one is union. The firm provided services to five corporate non-retainer clients during the past year.

There are three professional consultants. Fees are payable in hard dollars.

Douglas Dorn, Robert Helliesen and John Early, principals, are client contacts.

### Drexel Burnham Lambert

*60 Broad St., 12th Floor, New York, N.Y. 10004; (212) 480-6000*

Drexel Burnham Lambert Inc. provides development of investment policies and objectives; U.S manager evaluation and selection; and U.S. investment performance measurement and analysis.

The firm offers Asset Consultant Evaluator (A.C.E.), a disciplined approach to professional investment management, to the investment management industry. Consulting services provided include defining investment objectives and guidelines; identifying portfolio managers consistent with client needs and objectives; and quarterly evaluations of performance.

There are more than 500 retainer clients, including approximately 300 corporations. The firm also provided services to 2,000 non-retainer clients during the past year. Fees are payable in hard and soft dollars.

The firm offers a variety of investment services for funds not under professional management.

Ruth J. Harris, first vice president, is client contact.

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### The Edgecombe Group

*196 Adelaide St. W., Toronto, Ontario M5H 1W7; (416) 977-1980*

The Edgecombe Group, a subsidiary of North American Life Assurance Co., provides development of investment policies and objectives, and real estate investment management in Canada.

It offers specialty management in real estate, syndication management and open- and closed-end real estate commingled pools.

The firm has special expertise in portfolio management, property management and investment origination.

Of the 63 retainer clients, 50 are corporate, nine are public and four are union. The firm also served 20 non-retainer clients in the past year; 18 corporate and two public.

There are nine professional consultants. Fees are payable in hard dollars.

The firm offers Edgefund Realty Investment Corp., First Edgecombe Pension Properties Ltd. and the Nalaco Real Estate Fund as investment vehicles.

Clients include Bell Canada, Honeywell, Air Canada and Northern Telecom.

Roderick A. Carr-Harris, vice president-marketing, is client contact.

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### Effron Enterprises Inc.
*363 Westchester Ave., Port Chester, N.Y. 10573; (914) 939-0200*

Effron Enterprises Inc. provides U.S. and foreign performance measurement, analysis, diagnosis and accounting.

The firm offers a transaction accounting and reporting software system for client installation or on its online computer system. It also provides custom computer-related services for investment and financial analysis.

The firm has special expertise in portfolio performance analysis. It offers diagnostic tools to evaluate characteristics of an investment manager's approach to equity and fixed-income management.

There are 10 professional consultants. Fees are payable in hard or soft dollars.

Barry J. Effron, president, is client contact.

### J.H. Ellwood & Associates
*175 W. Jackson, Suite A-1827, Chicago, Ill. 60604; (312) 987-9008*

J.H. Ellwood & Associates Inc. provides development of investment objectives and policies, and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign investment performance measurement and analysis.

The firm also provides master trust selection, record-keeper selection, insurance contract negotiation, definition of actuarial policy and funding objectives and monitoring of legal and plan accounting issues.

There are 50 retainer clients.

There are seven professional consultants. Fees are payable in hard dollars.

Clients include the Brown Group, the Lutheran Church — Missouri Synod and New Mexico Pipe Trades.

John H. Ellwood, president, is client contact.

### Ennis, Knupp & Associates
*11 S. LaSalle St., Suite 1440, Chicago, Ill. 60603; (312) 263-4300*

Ennis, Knupp & Associates provides development of investment policies and objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign investment performance measurement and analysis.

The firm also offers asset/liability duration analysis; dynamic hedging consulting; active manager diversification analysis; topical research; and contract analysis.

The firm has special expertise in real estate, foreign investments and mutual fund analysis.

Of the 27 retainer clients, 12 are corporate, four are public and three are union. The firm also provided services to 11 non-retainer clients during the past year, including one corporate and two public.

There are 13 professional consultants. Fees are payable in hard and soft dollars.

James F. Knupp, principal, is client contact.

### Eppler, Guerin & Turner Inc.
*2001 Bryan Tower, Suite 2626, Dallas, Texas 75201; (214) 880-9000*

Eppler, Guerin & Turner Inc., a subsidiary of Principal Financial, provides development of investment policies and objectives and asset allocation; U.S. manager evaluation and selection; and U.S. investment performance measurement and analysis.

The firm provides portfolio analysis services to the investment management industry.

The firm has special expertise in manager selection and asset allocation.

Of the 23 retainer clients, 20 are corporate, two are public and one is a union. The firm provided services to eight non-retainer clients during the past year.

There are three professional consultants. Fees are payable in hard and soft dollars.

Clients include the City of Dallas and the H.E. Butt Grocery Co.

John A. Pickett, vice president, and Allan G. Restrepo, consultant, are client contacts.

### The Etherington Group
*522 University Ave., Suite 1200, Toronto, Ontario M5G 1W7; (416) 977-0350*

The Etherington Group provides development of investment policies and objectives, and appropriate asset allocation.

There are five professional consultants. Fees are payable in hard and soft dollars.

David H. Garard, vice president-corporate pension and benefits division, is client contact.

### Evaluation Associates Inc.
*25 Sylvan Road S., Westport, Conn. 06880; (203) 226-7864*

Evaluation Associates Inc., a subsidiary of MONY Financial Services, provides development of investment policies and objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. and foreign investment performance.

The firm also offers master trust evaluation and selection, and insurance contract negotiations.

The firm offers five publications to the investment management industry: "Investment Manager Profiles," "Small Equity Manager Profiles," "Real Estate Profiles," "International Manager Profiles" and "Insurance Contract Profiles."

The firm has special expertise in manager research and consulting in alternative investment areas, including real estate, international, options, futures, hedging techniques and venture capital.

Of the 51 retainer clients, 32 are corporate, five are public, two are union, six are foundations and six are eleemosynary. The firm also provided services to 10 non-retainer clients during the past year: eight corporate and two foundation.

There are nine professional consultants. Fees are payable in hard and soft dollars.

The firm offers 12 multiple manager mutual funds; a GIC collective trust; group trusts of small investment firms; an institutional timber fund; and an arbitrage fund.

William F. Brock, director of consulting, is client contact.

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Faulk & Co. Inc. provides development of policies and objectives and asset allocation; U.S. manager evaluation and selection; and measurement and analysis of U.S and foreign investment performance.

The firm has special expertise in public pension funds.

There are three professional consultants. Fees are payable in hard and soft dollars.

Clients include Georgia Peace Officers Annuity & Benefit Fund, Alabama Peace Officers Annuity & Benefit Fund and the Georgia Firemen's Pension Fund.

Anne Faulk, president, is client contact.

### Financial Control Systems

*200 Chadds Ford Professional Center, Suite 214, P.O. Box 182, Chadds Ford, Pa. 19317; (215) 358-2400*

Financial Control Systems Inc. provides development of investment policies and objectives; and U.S. investment performance measurement and analysis.

The firm also provides general ledger-based accounting for domestic and international pension plans; and audit trail/income verification/broker analysis/custodian analysis.

The firm offers investment accounting and financial reporting systems to the investment management industry.

The firm has special expertise in insurance company accounting and financial reporting.

Of the 20 retainer clients, 15 are corporate and five are public. The firm also provided services to five non-retainer clients during the past year, four corporate and one public.

There are seven professional consultants. Fees are payable in hard and soft dollars.

Clients include American Airlines, Campbell Soup, the City of Dallas and the Chicago Transit Authority.

Craig E. Heatter, senior vice president, is client contact.

### First Financial Evaluation Services

*9200 Shelbyville Road, Louisville, Ky. 40222; (502) 425-8011*

First Financial Evaluation Services provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and measurement and analysis of U.S. investment performance. The firm also offers advisory services for participant distributions and plan dissolution.

There are 11 corporate retainer clients. The firm also provided services to six non-retainer clients during the past year: four corporate, one union and one endowment.

There are three professional consultants. Fees are payable in hard and soft dollars.

William E. Sawyer and Alan Griffes, vice presidents, and E.G. Lehman, president, are client contacts.

### Gifford Fong Associates

*1600 Riviera Ave., Suite 285, Walnut Creek, Calif. 94596; (415) 932-1910*

Gifford Fong Associates provides development of investment policies and objectives and asset allocation; and U.S. investment performance measurement and analysis.

The firm also provides analytical tools for fixed-income and equity portfolio managers. The firm provides micro-based systems for the analytics of portfolio management, and offers assistance in application of research theory.

It has special expertise in fixed-income portfolio management and setting objectives.

Of the 120 retainer clients, 96 are corporate, 18 are public and six are union. The firm provided services to 15 non-retainer clients during the past year, 12 corporate and three public.

There are nine professional consultants. Fees are payable in hard and soft dollars.

Clients include CIGNA, Delaware Investment Management and the government of Singapore.

Tina Norris, vice president/applications consultant, is client contact.

### Funds Decision Services

*140 S. Lake Ave., Suite 250, Pasadena, Calif. 91101; (818) 795-5856*

Funds Decision Services Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. and foreign investment performance.

The firm also offers a 401(k) package and performance measurement for asset allocation accounts.

The firm offers marketing consulting, performance measurement, asset allocation and yield enhancement programs to the investment management industry.

The firm has special expertise in performance measurement of strategic asset allocation; consulting for emerging growth and international managers; and in 401(k) programs.

There are five corporate retainer clients. The firm also provided services to two non-retainer clients during the past year, one corporation and one association.

There are two professional consultants.

Fees are payable in hard and soft dollars.

Clients include H.S. Crocker, Earle M. Jorgensen and California Bankers Association.

The client contact is Jesse T. Ellington, vice president-sales and marketing.

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### Hamilton & Co. Inc.

*45 Rockefeller Center, New York, N.Y. 10020; (212) 397-5220; and 101 Carnegie Center, Princeton, N.J. 08540*

Hamilton & Co. Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. and foreign investment performance.

There are 40 retainer clients.

There are seven professional consultants. Fees are payable in hard or soft dollars.

Clients include Pan Am, Teco and Fairfax County, Va.

Susan A. Crotty, vice president, is client contact.

### Hammond & Hammond

*P.O. Box 3567, Bellevue, Wash. 98009; (206) 451-2600*

Hammond & Hammond, a subsidiary of Dean Witter Reynolds Inc., provides development of investment policies and objectives and asset allocation; U.S. manager evaluation and selection; and measurement and analysis of U.S. investment performance.

The firm has special expertise in manager selection for accounts of $100,000 to $2 million.

Of the 40 retainer clients, 10 are corporate and 30 are public.

There are two professional consultants. Fees are payable in hard or soft dollars.

Craig A. Hammond, vice president-investments, is client contact.

### Harris Trust and Savings Bank

*111 W. Monroe St., Chicago, Ill. 60603; (312) 461-3873*

Harris Trust and Savings Bank, a subsidiary of Harris Bankcorp, provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; U.S. performance measurement; and analysis of U.S. and foreign investment performance. The bank also offers Decision Impact Studies, which monitor the deployment of asset allocation and various investment policy decisions and their effects on the value of plan assets.

The firm offers consulting services that include analyses to help fund sponsors use active management effectively. Investment strategies are reviewed regularly. "Normal" portfolio construction forms a basis for these analyses.

Of the 10 retainer clients, nine are corporate and one is public.

There are five professional consultants. Fees are payable in hard or soft dollars.

Clients include Bell Atlantic and Manville Corp.

Young D. Chin, vice president, is client contact.

### B. Hauptman & Associates

*58 E. Burlington, Fairfield, Iowa 52556; (515) 472-8581*

B. Hauptman & Associates Inc. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and measurement and analysis of U.S. investment performance.

The firm has special expertise in equity management employing hedging strategies.

Of the 60 retainer clients, 15 are corporate and 45 are public. The firm provided services to 50 non-retainer clients in the past year, 10 corporate and 40 union.

There are three professional consultants. Fees are payable in hard and soft dollars.

The firm also offers a private investment fund, a segregated account program for smaller investors offering access to established management firms with high account minimums.

Bruce Hauptman, president, is client contact.

### Hewitt Associates

*100 Half Day Road, Lincolnshire, Ill. 60015; (312) 295-5000*

Hewitt Associates provides development of investment policies and objectives and asset allocation; U.S. and foreign manager evaluation and selection; U.S. and foreign investment performance measurement; and analysis of U.S. investment performance.

The firm also offers asset/liability projections, insurance contract consulting, real estate and venture capital consulting.

The firm has special expertise in integrated projections of pension assets and liabilities.

Of the 40 retainer clients, 37 are corporate, one is public and two are union. The firm also provided services to 70 non-retainer clients during the past year, 63 corporate and two public.

There are 10 professional consultants. Fees are payable in hard and soft dollars.

Clients include AMP, Adolph Coors, Hershey Foods and Primerica.

Ronald Jones, partner, is client contact.

### Holbein Associates Inc.

*17636 Windflower, Dallas, Texas 75252; (214) 380-9246*

Holbein Associates Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. and foreign investment performance.

The firm offers risk posture research services, portfolio diagnostics and performance measurement to the investment management industry.

The firm has special expertise in the total asset planning and manager evaluation and selection process.

Of the six retainer clients, one is public and five are corporate.

There is one professional consultant. Fees are payable in hard and soft dollars.

Clients include the Teachers Retirement System of Texas, Club Corp. of America and American General.

Richard Holbein, president, is client contact.

### E.F. Hutton Consulting Group

*824 Market St., Wilmington, Del. 19801; (302) 573-5885*

E.F. Hutton Consulting Group, a subsidiary of E.F. Hutton & Co. Inc., provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and measurement and analysis of U.S. investment performance.

The firm also provides trust services through E.F. Hutton Trust Co.

The firm has special expertise in customized performance reporting and a proprietary investment manager evaluation service.

Of the 97 retainer clients, 20 are corporate, 33 are public and 25 are union. The firm provided services to 41 non-retainer clients in the past year: 15 corporate, 18 public and eight union.

There are 52 professional consultants. Fees are payable in hard and soft dollars.

Clients include Arch Mineral, Blue Cross & Blue Shield United of Wisconsin, Chicago Painters and Decorators and Dana Corp.

Edward L. Hayes, vice president, and David Shanahan, first vice president, are client contacts.

### INDATA

*High Ridge Park, Bldg. 5, Stamford, Conn. 06905; (203) 329-6100*

INDATA, a service of Gordon, Haskett & Co., provides analysis of U.S. investment performance and foreign investment performance measurement.

It offers the IMS Investment Management System to the investment management industry. The system is a microcomputer-based portfolio management and security analysis system.

The firm has special expertise in comparative performance measurement, with weekly rankings within its 2,300-portfolio, $200 billion universe.

Of the 600 retainer clients, 27 are corporate, 16 are public and one is union.

There is one professional consultant. Fees are payable in soft dollars.

Steven N. Johnson, director of marketing, is client contact.

### Institutional Asset Management

*7557 Rambler Road, Suite 569, Dallas, Texas 75231; (214) 891-5666*

Institutional Asset Management provides development of investment policies and objectives and asset allocation; U.S. manager evaluation and selection; and measurement and analysis of U.S. investment performance.

The firm also offers manager selection for real estate and oil and gas investments.

The firm has special expertise in asset allocation, development of investment policies and U.S. manager evaluation and selection.

There are 10 corporate retainer clients. The firm provided services to 20 non-retainer clients during the past year, 18 corporate and two endowment.

There is one professional consultant. Fees are payable in soft dollars.

Anthony L. Schuman, managing director, is client contact.

### Institutional Fund Consultants Inc.

*2423 American Lane, Madison, Wis. 53704; (608) 244-3541*

Institutional Fund Consultants Inc. provides development of investment policies and objectives, and asset allocation; U.S. manager evaluation and

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selection; and measurement and analysis of U.S. investment performance.

Of the 21 retainer clients, 20 are corporate and one is union. The firm has provided services to 10 corporate non-retainer clients during the past year.

There are two professional consultants. Fees are payable in hard and soft dollars.

Gordon L. King, president, and Kathleen Crowley, vice president, are client contacts.

### Institutional Property Consultants Inc.

*7 Piedmont Center, Suite 715, Atlanta, Ga. 30305; (404) 261-8049; and 4330 LaJolla Village Drive, Suite 310, San Diego, Calif. 92122; (619) 458-1120*

Institutional Property Consultants Inc. offers development of investment policies and objectives, and asset allocation; U.S. manager evaluation and selection; and measurement and analysis of U.S. investment performance.

The firm also offers analysis of specified properties; portfolio analysis and restructuring; and definition and implementation of asset management policies and procedures.

The firm has special expertise in real estate transactions, development and management of property assets.

There are 24 retainer clients, of which seven are corporate, 16 public and one union.

There are four professional consultants. Fees are payable in hard and soft dollars.

Clients include California State Teachers' Retirement System, Federal Express, Wisconsin Investment Board and Dallas Employees' Retirement Fund.

Paul H. Saylor and Barbara R. Cambon, principals, are client contacts.

### Investment Direction Associates

*The Financial Center, Suite 900, Birmingham, Ala. 35203; (205) 250-5615*

Investment Direction Associates provides development of investment policies and objectives and asset allocation; U.S. manager evaluation and selection; and measurement and analysis of U.S. investment performance. The firm also provides monthly performance reports.

The firm has special expertise dealing with account sizes of $500,000 to $20 million for professional corporations.

The firm provided services for 350 corporate non-retainer clients during the past year.

There are four professional consultants. Fees are payable in soft dollars.

John G. Brock, president, is client contact.

### Investment Management Consultants

*5555 San Felipe, Suite 1000, Houston, Texas 77056; (800) 833-5648 (Texas); (800) 325-0108 (outside Texas)*

Investment Management Consultants, a subsidiary of Thomson McKinnon Securities Inc., provides development of investment policies and objectives, and asset allocation; U.S. and foreign manager evaluation and selection; U.S. and foreign investment performance measurement. Analysis of U.S. and foreign investment performance is done through its subsidiary, Performance Evaluation Resources Inc.

The firm also offers these services to the investment management industry.

The firm has special expertise in computerized daily portfolio monitoring and manager selection systems.

The firm provided services to 75 non-retainer clients during the past year, including 14 corporate and one public accounts.

There are two professional consultants. Fees are payable in soft dollars.

Clients include Walter P. Moore & Associates and the Texas City Firemen Relief Retirement Fund.

Ronald P. Schutz, vice president and director, is client contact.

### Investment Management Consultants Inc.

*2813 E. Camelback Road, Suite 400, Phoenix, Ariz. 85016; (602) 955-1540*

Investment Management Consultants Inc., a subsidiary of Rowland-Carmichael, provides development of investment policies and objectives, and asset allocation; U.S. manager evaluation and selection; and measurement and analysis of U.S. investment performance.

Of the 50 retainer clients, 42 are corporate and eight, union.

There are two professional consultants. Fees are payable in hard and soft dollars.

Timothy L. Rowland is client contact.

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*Pensions & Investment Age* will take a look at the issues facing public pension funds in the Nov. 30 issue.

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# j

### J&L Investment Services
*28570 Marguerite Parkway, Suite 201, Mission Viejo, Calif. 92692; (714) 364-5000*

J&L Investment Services Inc., an affiliate of Jesup & Lamont Holding Co., provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. investment performance measurement and analysis.

The firm provides economic and market research and market timing services to the investment management industry.

It has special expertise in manager selection and 401(k) plans.

Of the 10 retainer clients, nine are corporate and one, union. The firm provided services to 22 non-retainer corporate clients during the past year.

There are two professional consultants in-house and 16 available through allied firms. Fees are payable in hard and soft dollars.

Clients include Healthwest Foundation, Sacramento Regional Transit, Del E. Webb Foundation and Pomona First Federal Savings & Loan.

Thomas C. Jones, president, is client contact.

### Johnson & Higgins Willis Faber
*595 Bay St., Toronto, Ontario M5G 2G9; (416) 595-2860*

Johnson & Higgins Willis Faber provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; U.S. and foreign investment performance measurement; and analysis of foreign investment performance.

The firm publishes quarterly a Canadian pooled pension fund investment performance survey for the investment management industry.

There are two corporate retainer clients. The firm also provided services to 45 corporate non-retainer clients during the past year.

There are three professional consultants. Fees are payable in hard dollars.

Linda Grendon, assistant vice president, is client contact.

# k

### Ronald A. Karp Associates
*47 Maple St., Summit, N.J. 07901; (201) 522-1414*

Ronald A. Karp Associates Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. investment performance measurement and analysis.

The firm has special expertise in asset allocation, real estate, international investments, IPG renegotiation and GICs.

There are 12 retainer clients. The firm also provided services to 10 non-retainer clients during the past year.

There are three professional consultants. Fees are payable in hard and soft dollars.

Clients include Brockway, Kaiser Permanente Medical Group, Pennsylvania State Employes and Saatchi & Saatchi.

Ronald A. Karp, president, is client contact.

### Kauffman & Drebing Advisors
*230 S. Broad St., Philadelphia, Pa. 19102; (215) 546-8016*

Kauffman & Drebing Advisors provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. investment performance measurement and analysis.

The firm has special expertise in the selection of managers for small and midsize pension funds, endowments and individuals.

There are two professional consultants. Fees are payable in hard dollars.

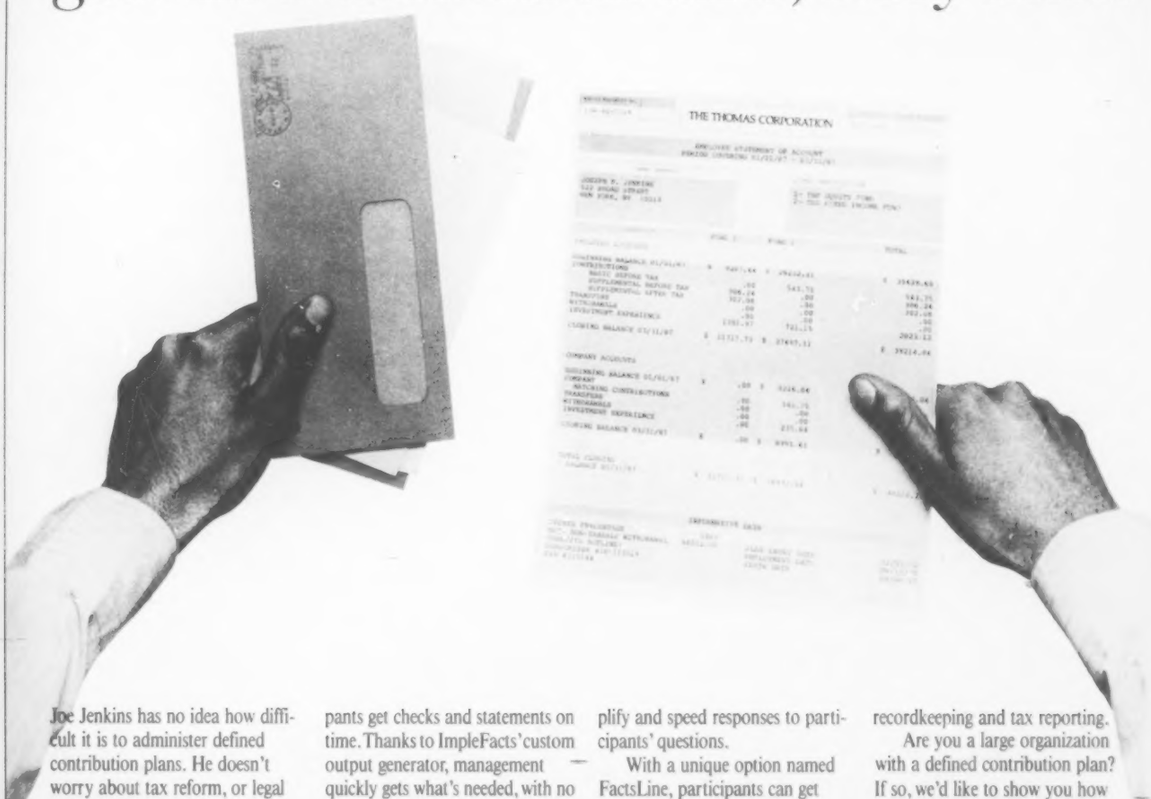
Barbara G. Drebing and Neil B. Kauffman, partners, are client contacts.

### William T. Kennedy Inc.
*300 W. Peachtree St. Suite 10G, Atlanta, Ga. 30308; (404) 523-8500*

William T. Kennedy Inc. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and performance measurement and analysis of U.S. investment performance. The firm also gives presentations to boards of trustees, staff and educational training.


*ImpleFacts—The Defined Contribution Administration System*

# Tax reform. Two major plans. 20,000 participants. But Joe Jenkins still gets his statement on time, every time.




Joe Jenkins has no idea how difficult it is to administer defined contribution plans. He doesn't worry about tax reform, or legal and regulatory changes that complicate an already complex problem. All he knows is that he always gets his statement on time.

Joe works for a large company that uses ImpleFacts to administer a defined contribution program with two major plans and 20,000 participants. Even the far-reaching effects of the new tax laws were taken in stride by this comprehensive software system from Erisco.

Not only do all 20,000 participants get checks and statements on time. Thanks to ImpleFacts' custom output generator, management quickly gets what's needed, with no special programming. This unique feature merges information from many sources, such as payroll, benefits, plan rules and participant accounts. Administrators can format and generate ad hoc reports, group summaries for example, by defining criteria online. They can amend plan changes online, or create reminders such as upcoming fund elections to be included as payroll stuffers. And they can design inquiry screens to simplify and speed responses to participants' questions.

With a unique option named FactsLine, participants can get routine account information via Touch-tone phone almost any time. It can cut administrative time and costs while improving service.

Since its introduction in 1972, the long-term benefits of ImpleFacts have been amply proved. The system's adaptability lets us make revisions and add enhancements when necessary. Its flexibility enables ImpleFacts to handle requirements ranging from 401(k)s, ESOPs and savings plans to loan recordkeeping and tax reporting.

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713-655-8192

It provides total portfolio analysis, performance comparison to the INDATA universe, risk/reward analyses and rankings, manager selection and peer group performance comparisons to the investment management industry.

The firm has special expertise in selecting portfolios from the INDATA universe that have the same fundamental characteristics as portfolios under analysis for customized performance ranking. The firm also provides attribution analysis with time-weighted rates of returns by 10 sectors within each portfolio.

Of the 12 retainer clients, six are corporate and two are union. The firm provided services to 60 non-retainer clients in the past year, including 23 corporate and six public.

There is one professional consultant. Fees are payable in hard and soft dollars.

William T. Kennedy, president, is client contact.

Global institutional investors will be profiled March 21.

### Kidder Peabody Prime Consulting Group

*20 Exchange Place, New York, N.Y. 10005; (212) 510-5089*

Kidder Peabody Prime Consulting Group, a subsidiary of General Electric Financial Services, provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; U.S. and foreign investment performance measurement; and analysis of U.S. investment performance.

The firm has special expertise in custom asset allocation studies.

Of the 125 retainer clients, 115 are corporate, five are public and five are union. The firm provided services to 150 non-retainer clients during the past year: 120 corporate, 15 public and 15 union.

There are nine professional consultants. Fees are payable in hard and soft dollars.

The client contacts are Natalka Bukalo, vice president, at (212) 510-5089, and Robert Padgette, vice president, at (404) 588-2343.

### Larry Klotz & Associates

*4126 Lake Shore Drive, New Buffalo, Mich. 49117; (616) 469-0204*

Larry Klotz & Associates provides hedge manager selection and portfolio insurance selection and consulting. The firm has special expertise in futures and options and portfolio liquidation during manager changes.

There are three corporate retainer clients. The firm also provided services to three corporate, non-retainer clients during the past year.

There are two professional consultants. Fees are payable in hard and soft dollars.

Larry Klotz, principal, is client contact.

## I

### Laventhol & Horwath

*1845 Walnut St., Philadelphia, Pa. 19103; (215) 299-1700*

Laventhol & Horwath provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. investment performance measurement and analysis.

The firm also provides real estate due diligence, market analysis, appraisal, valuation and construction consulting services, which it also offers to the investment management industry. The firm has special expertise in real estate.

Of the four retainer clients, two are corporate, one is public and one is union. The firm also provided services to two non-retainer clients during the past year, one corporate and one public. Fees are payable in hard and soft dollars.

Clients include Allied-Signal and the Massachusetts Bay Transit Authority.

J. Richard Rosenberg, director of pension advisory services, is client contact.

### Lehrer Development and Investments

*5555 Del Monte Drive, Suite 802, Houston, Texas 77056-4105; (713) 777-6777 and (713) 626-8184*

Lehrer Development and Investments provides development of investment policies, objectives and asset allocation; and U.S. and foreign manager evaluation and selection. The firm also provides market analysis, feasibility reports, specific property reviews and real estate business plans.

The firm provides specific property review reports, feasibility analysis, market analysis, investment and portfolio analysis and institutional documentation to the investment management industry and has special expertise in these areas.

The firm provided services to 20

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JB B

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non-retainer clients during the past year, 18 of which are corporate and two, public.

There are two professional consultants. Fees are payable in hard dollars.

Clients include Kaplan Management, Federal Home Loan Bank Board and Curtis International.

Kenneth Eugene Lehrer, managing partner, is client contact.

### Lipper Consulting Services

*69 New England Ave., Summit, N.J. 07726; (201) 522-1248*

Lipper Consulting Services provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation, selection; and U.S. and foreign investment performance measurement and analysis. The firm also provides mutual funds and closed-end investment companies selection and strategy formulation.

The firm publishes 10 reports for the investment management industry on fund performance, portfolio characteristics, fund fee and expense analysis, the brokerage industry and convertible securities.

The firm has special expertise in mutual funds and closed-end investment companies. An affiliate tracks the performance of more than 3,000 domestic and overseas investment companies, evaluates their portfolios and analyzes related data.

There are five retainer clients. The firm also provided services to 10 non-retainer clients during the past year.

There are three professional consultants. Fees are payable in hard or soft dollars.

Lipper Advisory Services Inc., an affiliate, is a registered investment adviser providing investment management services to pension funds, endowments and foundations. Portfolio assets are exclusively invested in funds.

Henry Shilling, director of marketing, is client contact.

### Lowry, Raclin, Harrell & Howerdd

*12700 Park Central Place, Suite 1912, Dallas, Texas 75251; (214) 387-9821*

Lowry, Raclin, Harrell & Howerdd offers development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. and foreign investment performance. The firm also offers a system that tests the client's actuarial policy and pension investment strategy to determine their impact on earnings per share under FASB 87. The system can test the impact on earnings per share of any investment advisory product.

The firm has special expertise in a cost reduction methodology using the integration of actuarial and investment policies while measuring complementary investment styles and performance over long periods.

There are 69 retainer clients, of which 64 are corporate, two, union and three, foundation.

There are eight professional consultants. Fees are payable in hard and soft dollars.

Clients include Black & Decker Manufacturing, Campbell Soup, Emerson Electric and Potomac Electric Power.

Linda Ellis, vice president, is client contact.

m

### Marquette Associates Inc.

*2 First National Plaza, Chicago, Ill. 60603; (312) 346-7200*

Marquette Associates Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. and foreign investment performance. It also offers dividend and interest and commission rate audits.

The firm provides investment manager performance audits and analyses in conjunction with a Big Eight accounting firm to the investment management industry.

The firm has special expertise in asset allocation.

There are 14 retainer clients, 11 corporate, two public and one union. The firm also provided services to three non-retainer clients during the past year, two corporate and one public.

There are three professional consultants. Fees are paid in hard dollars and in soft dollars.

Anne Werner, vice president, is client contact.

### Marquette Bank Minneapolis

*6th and Marquette, Minneapolis, Minn. 55118; (612) 341-7914*

Marquette Bank Minneapolis provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and measurement and analysis of U.S. investment performance.

The bank also provides custodial services, mutual fund accounting and employee benefit record-keeping to the investment management industry.

The bank provided services to 50 non-retainer clients during the past year, 45 corporate, three public and two union.

The bank offers common trust funds for employee benefit clients.

Andrew Freeman, trust sales officer, is client contact.

### James P. Marshall Inc.

*10 King St. E., 10th Floor, Toronto, Ontario M4N 1K9; (416) 361-0225*

James P. Marshall Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. and foreign investment performance. The emphasis is on Canadian managers.

The firm provides services primarily to pension sponsors, but also conducts surveys and does special reports for the investment management industry.

Its special expertise is in development of investment policies, manager selection and performance and needs monitoring.

Of the 25 retainer clients, 16 are corporate, four are public and five are union. The firm also provided services to 10 non-retainer clients during the past year, five corporate, two public and three union.

There are five professional consultants. Fees are payable in hard dollars.

Clients include Coca-Cola, Navistar, Westinghouse Canada and Lafarge.

M. Ann Marshall, president, is client contact.

### James Meketa Associates

*1029 Beacon St., Newton Centre, Mass. 02159; (617) 964-0375*

James Meketa Associates Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. and foreign investment performance. The firm also develops proprietary investment software products.

The firm has special expertise in the development and coordination of multi-manager investment plans.

There are 10 retainer clients: six corporate, three union and one endowment. The firm also provided services to seven non-retainer clients during the past year, including three corporate and two union accounts.

There are six professional consultants. Fees are payable in hard dollars.

Clients include Northwest Airlines, Ohio Laborers' Pension Fund and GNB Inc.

John A. Denney, vice president, is client contact.

### Wm. M. Mercer-Meidinger-Hansen Inc.

*1417 Lake-Cook Road, Deerfield, Ill. 60015; (312) 948-7400*

Wm. M. Mercer-Meidinger-Hansen Inc., a subsidiary of Marsh & McLennan, provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. and foreign investment performance.

The firm also offers transaction cost evaluation of U.S. equity managers and asset/liability modeling.

The firm has special expertise in asset/liability modeling, international manager selection and transaction cost evaluation.

The firm has 150 retainer clients, including 70 corporate, 30 public and 20 union. The firm also provided services to 450 non-retainer clients during the past year, including 250 corporate, 75 public and 50 union.

There are 45 professional consultants. Fees are payable in hard dollars.

Clients include the State of Arizona, Arthur Andersen, Ralston Purina and the Major League Baseball Players Association.

S.A. Lincoln, managing director, is client contact.

### Merrill Lynch Consulting Services

*P.O. Box 9017, Princeton, N.J. 08543; (609) 282-1477*

Merrill Lynch Consulting Services, a subsidiary of Merrill Lynch, Pierce, Fenner & Smith, provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and measurement and analysis of U.S. investment performance.

Fees are payable in hard and soft dollars.

Philip Sloan, vice president and manager, is client contact.

### Money Manager Research

*875 Prospect St., La Jolla, Calif. 92037; (800) 854-1517 (outside California); (800) 221-2295 (California)*

Money Manager Research provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. and foreign investment performance.

The firm offers international quotations, performance monitoring, management search and referral services to the investment management industry.

It has special expertise in management firm audits, referrals, investment committee consulting and investment plan auditing and consulting.

Of the 97 retainer clients, 43 are corporate and 54 are public. The firm also provided services to 19 non-retainer clients during the past year: seven corporate, 10 public and two union.

There are eight professional consultants. Fees are payable in hard and


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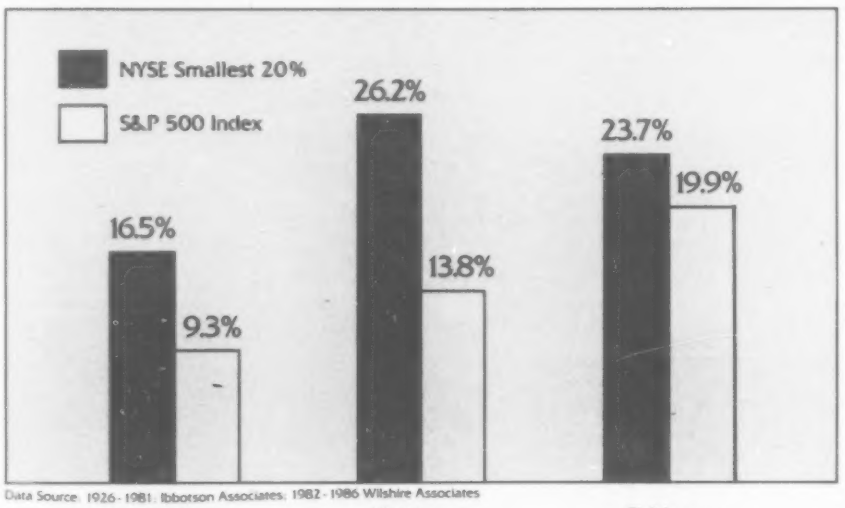


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Clients include the International Brotherhood of Electrical Workers and Grove Chemical.

Donald Davis, first vice president, is client contact.

### Monitoring and Evaluation Services Inc.

*3375 Park Ave., Suite 3006, Wantagh, N.Y. 11793; (516) 781-2000*

Monitoring and Evaluation Services Inc. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and measurement and analysis of U.S. investment performance.

The firm offers the reporting of composite returns from its tax-exempt fund data base to the investment management industry.

The firm has special expertise in quarterly and annual computer-generated performance measurement reports, using a data base of more than 6,000 equity, fixed-income and balanced tax-exempt funds.

Of the seven retainer clients, one is public and six are union. The firm provided services to five non-retainer union clients during the past year.

There are two professional consultants. Fees are payable in soft dollars.

Clients include New York City Uniformed Fire Officers Local 854; New York City Detectives Endowment Association; Communications Workers of America Local 1101; and the New York City Housing Patrolmen's Benevolent Association.

John T. Renck, president, is client contact.

### Morgan Keegan & Co. Inc.

*50 N. Front St., Memphis, Tenn. 38103; (901) 529-3797*

Morgan Keegan & Co. Inc provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. and foreign investment performance. It also offers pension plan design, installation and administration.

The firm offers equity and fixed-income research to the investment management industry.

Its special expertise is in performance measurement and manager evaluation and selection.

Of the eight retainer clients, six are corporate, one is public and one is an endowment. The firm also provided services to 100 non-retainer clients during the past year: 80 corporate, five public, eight union and seven endowment.

There are seven professional consultants. Fees are payable in hard and soft dollars.

J. Blake Taylor, assistant vice president, is client contact.

## n

### New England Pension Consultants

*Church Green, 101 Summer St., Boston, Mass. 02110; (617) 348-2950*

New England Pension Consultants provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. and foreign investment performance. The firm also provides custodial audits.

It offers investment performance and analysis and special research studies to the investment management industry.

It has special expertise in hedging strategies, structured portfolios and Taft-Hartley consulting.

There are three professional consultants. Fees are payable in hard and soft dollars.

Richard M. Charlton, president, is client contact.

### The Nottingham Co.

*105 N. Washington St., P.O. Drawer 8315, Rocky Mount, N.C. 27804; (919) 972-9922*

The Nottingham Co. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; U.S. performance measurement and analysis; and foreign investment performance analysis.

The firm also offers assistance with the design of qualified plans and individual trusts; identification of appropriate professional counsel; and identification of appropriate administrative, custodial and trustee services.

The firm offers soft-dollar, third-party research and equipment to the investment management industry and is developing a series of mutual funds to act as sponsor and underwriter.

The firm has special expertise in retirement plan design and implementation; cost benefit analysis of alternatives; and awareness of investment alternatives.

There are 50 corporate retainer clients. The firm also provided services to 15 corporate non-retainer clients during the past year.

There are two professional consultants. Fees are payable in hard and soft dollars.

Frank P. Meadows III, president, is client contact.

## o

### The Option Consulting Group Inc.

*17 Madison Ave., Port Chester, N.Y. 10573; (914) 939-1543*

The Option Consulting Group Inc. provides the development of investment policies, objectives and asset allocation; and measurement and analysis of U.S. and foreign investment performance. The firm also provides market simulation research and owns extensive historical stock, option and index data bases and quantitative simulation models for strategy evaluation.

The firm provides historical strategy simulation models and option overwriting and mathematical asset allocation optimizers to the investment management industry.

It has special expertise in U.S. stock options, and it installs high-speed links from satellite quote systems to client computers for complex real-time trading strategies.

There are five corporate retainer clients. The firm provided services to two corporate non-retainer clients in the past year.

There are five professional consultants. Fees are payable in hard and soft dollars.

The firm licenses four proprietary investment products: option overwriting; currency optimization; global asset optimization; and equity optimization.

Clients include Balch, Hardy & Scheinman and the International Option Investment Trust.

Kurt G. Hiebaum, president, is client contact.

### Orben Associates Inc.

*40 Wall St., New York, N.Y. 10005; (212) 269-9191*

Orben Associates Inc. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. investment performance measurement.

The firm has special expertise in asset allocation and quantification of investment objectives.

The firm provided services to eight corporate non-retainer clients during the past year.

There are two professional consultants. Fees are payable in hard dollars.

Jack R. Orben, president, is client contact.

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The 1,000 largest funds will be profiled in the Jan. 25 issue.


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# P

### PaineWebber inc.

*1285 Avenue of the Americas, New York, N.Y. 10019; (212) 713-2625; 1 Greenway Plaza, Houston, Texas 77046; (713) 993-7233*

PaineWebber Inc. provides development of investment policies and objectives; U.S. manager evaluation and selection; and measurement and analysis of U.S. investment performance.

The Houston office also provides development of asset allocation; searches for plan administrators; assistance in managing short-term cash; and searches for short-term cash managers.

The firm has special expertise in plans with assets of $250,000 to $25 million; and with performance measurement and adviser searches.

There are 12 professional consultants. Fees are payable in soft dollars.

The Houston office offers full trustee services for qualified plans of more than $50,000 in assets.

Jennifer P. Schiffman, vice president, is client contact in New York. Frank Savage, vice president-investments, is the client contact in Houston.

### Peat Marwick

*345 Park Ave., New York, N.Y. 10154; (212) 872-5973*

Peat Marwick provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. investment performance.

The firm also provides investment performance attestation on manager return data to the investment management industry.

The firm has special expertise in investment policy, manager searches — especially international managers, and monitoring.

There are 10 professional consultants. Fees are payable in hard and soft dollars.

Clients include Blue Cross and Blue Shield of North Carolina, Capital Blue Cross, Carlisle Companies and Girl Scouts of the U.S.A.

Evelyn Morgner, senior manager, is client contact.

### Pension Realty Advisors Inc.

*100 Spear St., San Francisco, Calif. 94105; (415) 896-0900*

Pension Realty Advisors Inc. provides development of investment policies, objectives and asset allocation; U.S. real estate manager evaluation and selection; U.S. investment performance measurement; and analysis of U.S. real estate investment performance.

The firm provides consulting and also publishes its "Closed End Realty Fund Report" quarterly for the investment management industry.

The firm has special expertise in real estate investment planning, program management and independent fiduciary representation.

The firm has eight retainer clients: of which one was corporate, six were public and one, union. It also served seven non-retainer clients in the past year, four of which were corporate and three, union.

There are six professional consultants. Fees are payable in soft and hard dollars.

Clients include the New York State Common Retirement Fund and Alaska Permanent Fund.

William L. Ramseyer, president, is client contact.

### Pension Consulting Services

*201 E. Fifth St., Suite 1500, Cincinnati, Ohio 45202; (513) 762-7414*

Pension Consulting Services, a subsidiary of Prescott, Ball & Turben Inc., provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. and foreign investment performance.

The firm has special expertise in risk analysis and special report customization.

Of its 40 retainer clients, 23 are corporate, one is public, five are union and 12 are endowments. The firm also provided services to 10 non-retainer clients during the past year, six of which were corporate, two were public and two, union.

There are four professional consultants. Fees are payable in hard and soft dollars.

Clients include the Michigan State University Foundation and the Indiana Statewide Rural Electric Co-op.

H. Bradley Eden, director, is client contact.

### Pension Investors Securities

*1180 Spring Centre South Blvd., Suite 225, Altamonte Springs, Fla. 32714; (305) 869-4233*

Pension Investors Securities Corp. provides development of investment policies, objectives and asset allocation.

The firm develops and implements five-year financial plans for small to medium-sized pension plans and has special expertise in asset allocation and investment program selection.

The firm provided services to 205 non-retainer clients during the past year, of which 202 were corporate and three, union.

There are eight professional consultants. Fees are payable in hard and soft dollars.

Fred A. Forbes, president, is client contact.

### Performance Analysis Group

*300 Gem Plaza, Dayton, Ohio 45402; (800) 223-0644*

Performance Analysis Group, a subsidiary of Shearson Lehman Brothers/American Express, provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; limited foreign manager evaluation and selection; and U.S. performance measurement and analysis. The firm also provides custody insured to $10 million and assists in selecting plan administrators.

Of the 114 retainer clients, 85 are corporate.

There are two professional consultants. Fees are payable in soft dollars.

Clients include the Dayton Philharmonic, Tait Foundation and Stop & Go.

William T. Leakas, senior vice president and financial consultant, is client contact.

### Performance Analytics Inc.

*30 S. Wacker Drive, Suite 1502, Chicago, Ill. 60606; (312) 930-9560*

Performance Analytics Inc. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and measurement and analysis of U.S. investment performance.

It provides limited evaluation services to the investment management industry.

The firm has special expertise in manager selection based on style and tilting of managers based on style and asset allocation.

There are four professional consultants. Fees are payable in hard and soft dollars.

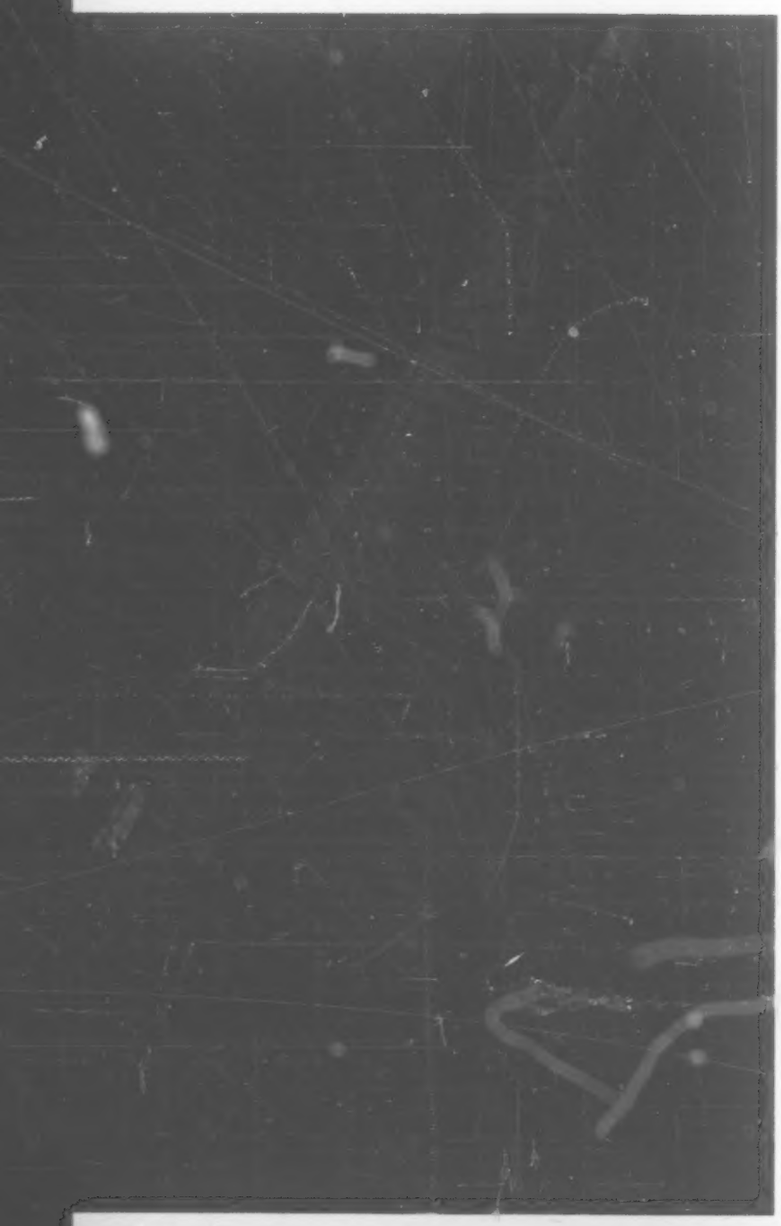
Clients include IC Industries, Ralston Purina, May Co. and Sears.

William G. Lowery, principal, is client contact.

### Performance Evaluation Resources Inc.

*1 State Street Plaza, New York, N.Y. 10004; (212) 482-5808*

Performance Evaluation Resources Inc., a subsidiary of Thomson McKinnon Inc., provides development of investment policies, objectives and asset allocation; U.S. and foreign manager

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The firm offers performance measurement and evaluation and consistency analysis to the investment management industry.

It has special expertise in consistency analysis, peer group analysis and comparative background tailored to the client's asset allocation.

The firm has 12 corporate retainer clients. It also provided services to three non-retainer clients during the past year, two of which were corporate and one, public.

There are three professional consultants. Fees are payable in hard and soft dollars.

Sheila Warner, vice president, is client contact.

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*363 Westchester Ave., Port Chester, N.Y. 10573; (914) 937-7111*

The Plan Sponsor Network Inc., a joint venture of Berg Fiduciary Consultants and Effron Enterprises Inc., provides on-line access to data on more than 500 U.S. managers and 75 international/global managers via personal computer.

Access is limited to pension plan sponsors, boards of trustees and consultants. There are more than 35 subscribers.

Fees are payable in hard and soft dollars.

Paul E. Berg, chairman, is client contact.

### Portfolio Management Consultants Inc.

*1113 Spruce St., Boulder, Colo. 80302; (303) 444-8471*

Portfolio Management Consultants Inc. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and measurement and analysis of U.S. investment performance.

The firm provides investment performance analysis and evaluation to the investment management industry.

It has special expertise in manager searches and performance measurement.

There are four professional consultants. Fees are payable in hard and soft dollars.

Kenneth S. Phillips, president, is client contact.

### Prudential-Bache Securities Investment Management Consulting Services

*100 Gold St., New York, N.Y. 10038; (212) 406-6110*

Prudential-Bache Securities Investment Management Consulting Services, a subsidiary of Prudential Insurance, provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and measurement and analysis of U.S. investment performance.

The firm has special expertise in the development of investment policy statements, manager search and selection and investment performance reviews.

Of the 260 retainer clients, 140 are corporate, 30 are public and 40 are union.

There are 22 professional consultants. Fees are payable in hard and soft dollars.

Clients include BIC Pen, Michigan Milk Producers, Hawaii Laborers and the Archdiocese of San Francisco.

Victor P. Rosasco, senior vice president and national director, and Kathleen W. Ferguson, associate vice president and assistant department manager, are client contacts.

## q

### Quan-Vest Consultants Inc.

*390 Plandome Road, Manhasset, N.Y. 11030; (516) 365-4619*

Quan-Vest Consultants Inc. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and measurement and analysis of U.S. investment performance.

The firm provides new product development for the investment management industry.

It has special expertise in performance attribution and short-term asset allocation.

Of the 23 retainer clients, six are corporate, one is public and 16 are union. The firm also provided services to one union non-retainer client during the past year.

There are three professional consultants. Fees are payable in hard dollars.

Clients include Uniformed Fire Officers, National Maritime Union, Textile Workers Union and Amalgamated Clothing Workers.

Anthony F. Lotruglio, president, is client contact.

## r

### Refco Pension Investment Programs Monitoring & Evaluation Services Inc.

*One World Financial Center, 200 Liberty St., Tower A, New York, N.Y. 10281; (212) 385-8471*

Refco Pension Investment Programs Monitoring & Evaluation Services Inc., a subsidiary of Refco Capital, provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. and foreign investment performance.

The firm also provides transaction cost analysis, training programs, futures and options performance measurement, analysis of hedging programs, and GNMA and bond swap analysis.

It has special expertise in transaction cost analysis, diagnostic performance measurement, research projects, hedging strategy analysis and futures and options.

There are 12 professional consultants. Fees are payable in hard and soft dollars.


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Ronald K. Brandes, managing director, is client contact.

### Richards & Tierney Inc.

*111 W. Jackson Blvd., Chicago, Ill. 60604; (312) 461-1100*

Richards & Tierney Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection and performance measurement; and analysis of U.S. investment performance.

The firm also provides pension fund performance analysis regarding investment policy, structure, management and strategy.

The firm offers design, construction, maintenance and analysis of benchmark portfolios to the investment management industry.

It has special expertise in building and using benchmark portfolios and designing and managing its Dynamic Completeness Fund.

Of the 24 retainer clients, 21 are corporate and three are public. The firm also provided services to one corporate non-retainer client during the past year.

There are three professional consultants. Fees are payable in hard and soft dollars.

Its investment vehicles include the Dynamic Completeness Fund and the Passive Core Fund.

Clients include Air Products and Chemicals, the Commonwealth of Virginia, Delta Air Lines and Fidelity Management Trust.

Thomas M. Richards, principal, is client contact.

### Robinson-Humphrey Co.

*3333 Peachtree Road N.E., Atlanta, Ga. 30326; (404) 266-6542*

The Robinson-Humphrey Co. Inc., a subsidiary of Shearson Lehman Brothers Inc., provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and measurement and analysis of U.S. investment performance.

The firm also provides employee benefit plan design consultation.

It offers research, block trading and securities custody to the investment management industry.

The firm has special expertise in managers based in the Southeast.

The firm provided services to 1,200 non-retainer clients during the past year, of which 900 were corporate, 200 were public and five, union.

There are five professional consultants. Fees are payable in hard and soft dollars.

The firm offers a comprehensive spectrum of investment vehicles.

Michael L. Bolen, vice president, is client contact.

### Rogers, Casey & Barksdale

*29 Federal St., Stamford, Conn. 06901; (203) 356-9400*

Rogers, Casey & Barksdale Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. and foreign investment performance. It also provides direct supervision of specialized investment programs.

The firm offers specialized research projects to the investment management industry.

It has special expertise in financial planning and multiple manager programs.

Of the 28 retainer clients, 26 are corporate and two are public. The firm also provided services to eight corporate non-retainer clients during the past year.

There are seven professional consultants. Fees are payable in hard dollars.

John F. Casey, president, and James F. Beasley, chief operating officer, are client contacts.

### The Brian Rom Corp.

*860 Fifth Ave., New York, N.Y. 10021; (212) 724-7535*

The Brian Rom Corp. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. investment performance measurement and analysis.

The firm also provides assistance in establishing and maintaining South Africa-free portfolios. The firm is the publisher of SAFE, the South Africa Free Equity universe.

It offers performance information on South Africa-free portfolios to the investment management industry.

Its special expertise is in investment policy development, performance monitoring and South Africa-free portfolios.

The firm has four clients on retainer, of which one is corporate and two are endowments. It also provided services for nine non-retainer clients, of which six are corporate and one is an endowment.

There are four professional consultants.

Clients include the Peter J. Schmitt Co. and the University of Pennsylva-

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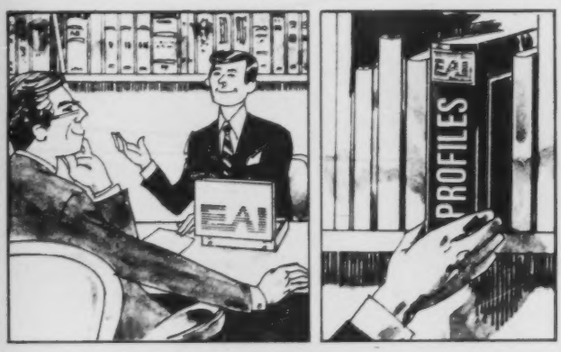


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Brian M. Rom, president, is client contact.

### Rotan Mosle Managed Account Group

*700 Louisiana, Suite 3700, Houston, Texas 77002-2731; (713) 236-3000*

Rotan Mosle Managed Account Group, a subsidiary of PaineWebber Inc., provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and measurement and analysis of U.S investment performance.

The firm also provides evaluation of risk management systems and return attribution analysis; studies of plan constraints; and master trustee/custodian selection.

The firm has special expertise in funds with assets between $1 million and $75 million, focusing on investment policy analysis, customized performance standards, transaction analysis and specialized studies.

Of the 50 retainer clients, 30 are corporate, 15 are public and five are union. The firm also provided services to 75 non-retainer clients during the past year — 45 corporate, 20 public and 10 union.

There are 10 professional consultants. Fees are payable in hard and soft dollars.

Investment management services are available through Mitchell Hutchins Asset Management, a division of the parent company.

Betty Gragg, senior vice president, is client contact.

### Roulac Real Estate Consulting Group

*50 California, Suite 1300, San Francisco, Calif. 94111; (415) 433-0300*

Roulac Real Estate Consulting Group, a subsidiary of Deloitte Haskins & Sells, provides development of real estate investment policies, objectives and asset allocation; U.S. and foreign real estate manager evaluation and selection; and measurement and analysis of U.S. and foreign real estate investment performance.

The firm offers strategic planning, product development and general real estate consulting services and publications to the investment management industry.

It has special expertise in real estate strategy and policy development; real estate manager selection; property and transaction analysis; and performance measurement.

There is one public retainer client. The firm provided services to 50 non-retainer clients during the past year, of which 47 were corporate and three, public.

There are 40 professional consultants. Fees are payable in hard dollars.

Clients include the California Public Employees' Retirement System.

Jake Young, senior manager, is client contact.

### Rubidge Associates

*123 W. Franklin St., Chapel Hill, N.C. 27514; (919) 929-2054*

Rubidge Associates provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and measurement and analysis of U.S. investment performance.

There are four retainer clients. The firm also provided services to two non-retainer clients during the past year.

There is one professional consultant. Fees are payable in hard dollars.

D. Bruce Rubidge, principal, is client contact.

### Frank Russell Co.

*1100 First Interstate Plaza, Tacoma, Wash. 98402; (206) 572-9500*

Frank Russell Co. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analyses of U.S. and foreign investment performance.

The firm also provides Russell real estate and equity market indexes; special research and development projects; analytical software; real estate manager evaluation and selection; and asset/liability modeling.

There are more than 40 retainer clients. There are 128 professional consultants.

The firm also offers investment management through two subsidiaries: Frank Russell Trust Co. and Frank Russell Investment Management Co.

Tony Whatley, director of marketing, is the client contact.

## S

### Richard Schilffarth & Associates Ltd.

*1201 N. Prospect Ave., Milwaukee, Wis. 53202; (414) 276-4140*

Richard Schilffarth & Associates Ltd. provides development of investment policies and objectives; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement.

The firm provides manager search information and fund analysis/performance reviews to the investment management industry.

It has special expertise in research of investment managers.

There are five professional consultants. Fees are payable in hard and soft dollars.

Raymond C. Krieg, vice president, is client contact.

### Segal Advisors Inc.

*730 Fifth Ave., New York, N.Y. 10019; (212) 586-5600*

Segal Advisors Inc., a subsidiary of Martin E. Segal Co., provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. and foreign investment performance. The firm also offers brokerage commission management fee evaluation and master trust service analysis.

Its special expertise is in relating investment programs to actuarial characteristics of benefit plans.

There are more than 50 retainer clients. The firm also provided services to 25 non-retainer clients during the past year.

There are 12 professional consultants. Fees are payable in hard dollars.

Martin Levenson, senior vice president and actuary, is client contact.

### SEI Corp.

*680 E. Swedesford Road, Wayne, Pa. 19087; (215) 254-1000*

SEI Corp. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. and foreign investment performance.

The firm also provides master trustee evaluation and selection; trading cost evaluation and consulting; and topical consulting on pension and investment issues.

It offers performance consulting and measurement, trading cost evaluation and consulting, and marketing and business consulting to the investment management industry.

SEI has special expertise in performance measurement, manager selection, FASB considerations and investment policy planning.

Of the 60 retainer clients, 30 are corporate, 20 are public and 10 are union. The firm also provided services to 800 non-retainer clients during the past year, of which 400 were corporate, 270 were public and 130, union.

There are 45 professional consultants. Fees are payable in hard and soft dollars.

Clients include Army and Air Force Exchange, State of Florida, Halliburton and Louisiana State Employees.

Edward Loughlin, senior vice president, is client contact at (215) 254-1991.

### Select Benefits Inc.

*2400 Dain Tower, Minneapolis, Minn. 55402; (612) 371-2230*

Select Benefits Inc., a subsidiary of Dain Bosworth Inc., offers development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. and foreign investment performance. The firm also offers administrative services, such as plan participant record-keeping.

It also administers small pension plans for investment management firms.

It has special expertise in record-keeping and plan asset consulting.

There are 58 corporate retainer clients. There are three professional consultants. Fees are payable in hard and

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soft dollars.

Clients include Inter-Regional Financial Group, Red Owl Stores and Rauscher Pierce Refsnes.

Ernest Andberg, vice president-investment services, is client contact.

### Sentinel Investment Management Corp.

*34 S. Broadway, White Plains, N.Y. 10601; (914) 683-3970*

Sentinel Investment Management Corp. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and measurement and analysis of U.S. investment performance.

The firm has special expertise with closely held corporations.

There are 35 retainer clients.

There are three professional consultants. Fees are payable in hard dollars.

Lawrence Eichler, president, is client contact.

### Jeffrey Slocum & Associates

*5200 W. 73rd St., Minneapolis, Minn. 55435; (612) 893-1955*

Jeffrey Slocum & Associates Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. and foreign investment performance.

Its expertise is in its asset allocation, performance measurement and performance analysis capabilities.

Of the 30 retainer clients, 19 are corporate and four are union. The firm also provided services to seven non-retainer clients during the past year, of which four were corporate, one was public and one, union.

There is one professional consultant. Fees are payable in hard and soft dollars.

Clients include the State of Iowa, Blue Cross & Blue Shield of Minnesota, Amherst H. Wilder Foundation and Marquette Bank Minneapolis.

Jeffrey C. Slocum, president, is client contact.

### Smith Hayes Financial Services Corp.

*780 NBC Center, Lincoln, Neb. 68508; (402) 476-3000*

Smith Hayes Financial Services Corp. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and measurement and analysis of U.S. investment performance.

The firm offers brokerage in stocks and bonds and dealer markets in corporate, municipal and governments to the investment management industry.

It has special expertise in the development of investment plans and the selection of managers to meet objectives.

There are 10 corporate retainer clients. The firm also provided services to 28 non-retainer clients during the past year, of which 10 were corporate and 18, public.

There are nine professional consultants. Fees are payable in hard and soft dollars.

W.F. Groszkruger, president, is client contact.

### Southeastern Advisory Group Inc.

*10 Piedmont Center, Suite 302, Atlanta, Ga. 30305; (404) 237-3156*

Southeastern Advisory Group Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. and foreign investment performance.

The firm also provides custodian bank audits and transaction cost and trading execution evaluations.

The firm offers audit results of financial statements to the investment management industry.

It has special expertise in analysis of investment performance and consulting services for funds less than $200 million.

There are seven corporate retainer clients. The firm also provided services to 11 non-retainer clients during the past year.

There are four professional consultants. Fees are payable in hard or soft dollars.

Bishop F. Smith Jr., chairman, is client contact.

### Southern Plantations Group

*P.O. Box 1683, Albany, Ga. 31702; (912) 439-0012*

Southern Plantations Group Inc. provides consulting and management services for investors in agricultural and timber land. The firm analyzes individual properties as well as industry trends and developments.

It provides consultation and management in the agriculture, forestry and agribusiness sectors to the investment management industry.

Its special expertise is in agriculture, forestry, agribusiness analysis and management.

There are nine corporate retainer clients. The firm also provided services

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to four non-retainer clients during the past year, two corporate and two public.

There are five professional consultants. Fees are payable in hard dollars.

The firm also offers its own investment vehicles in agricultural and timber land.

Joseph H. Marshall, president, is client contact.

### Stolper & Co.

*525 B St., Suite 630, San Diego, Calif. 92037; (619) 231-9102*

Stolper & Co. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement.

The firm has special expertise in hedge funds.

Of the 600 retainer clients, 300 are corporate and two are union.

There are three professional consultants. Fees are payable in hard and soft dollars.

Wilma J. Engel, consultant, is client contact.

### Stratford Advisory Group

*120 S. Riverside Plaza, Suite 1456, Chicago, Ill. 60606; (312) 902-1985*

Stratford Advisory Group Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. performance measurement and analysis. The firm also provides ongoing assistance in determining optimal asset allocation.

It offers research services to a select group of investment management firms that incorporate the firm's Strategic Asset Allocation system, which is its special expertise.

The firm has about 30 retainer clients, of which 10 are corporate, one is public, one is union and 18 are endowments and foundations. The firm also provided services to non-retainer clients during the past year, of which two were corporate, one was public, one was union and six, endowments and foundations.

There are four professional consultants. Fees are payable in hard and soft dollars.

Clients include the Carnegie Institute, Knight-Ridder, Fairchild Industries and Beth Israel Hospital.

Ronald Schmitz, senior consultant, is client contact.

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## T

### Towers, Perrin, Forster and Crosby Inc.

*245 Park Ave., New York, N.Y. 10167; (212) 309-3400*

Towers, Perrin, Forster and Crosby Inc. provides development of investment policies, objectives and asset allocation; Canadian manager evaluation and selection; and analysis of U.S. and foreign investment performance.

The firm also provides financial planning through the integration of asset returns and liability forecasts in stochastic models; and external and internal management structure.

The firm has special expertise in investment policy/asset allocation; asset/liability modeling; and evaluation of portfolio insurance and other dynamic asset allocation strategies.

The firm provided services to 100 corporate non-retainer clients during the past year. There are 25 professional consultants. Fees are payable in hard dollars.

Client contacts are Rowland Davis in Chicago at (312) 781-0300; Herb Kosloff in New York at (212) 309-3511; and John Sweeney in Atlanta at (404) 261-7820.

### Tremont Partners Inc.

*880 Canal St., Stamford, Conn. 06902; (203) 348-3709*

Tremont Partners Inc., a subsidiary of Lynch Asset Management Co., provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. and foreign investment performance.

The firm also provides product development; structuring and organizing investment programs; and supervising operations of investment progress.

It offers product development and structuring and organizing of investment programs to the investment management industry.

It has special expertise in U.S. and international equities and fixed income, real estate, venture capital and private partnerships.

There are three professional consultants. Fees are payable in hard dollars.

Ron Lake, director of research, and Sandra Manzka, president, are client contacts.

## V

### Vantage Financial Management Co.

*2002 B Morton Drive, Charlottesville, Va. 22901; (804) 977-8942*

Vantage Financial Management Co. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and measurement and analysis of U.S. investment performance. The firm also provides equity and fixed-income portfolio construction.

The firm offers specialized contract research, investment management product development and enhancement, and product marketing consulting to the investment management industry.

Its special expertise is in macro-economic asset allocation planning, investment manager risk evaluation and strategically defensive portfolio construction.

Of the three retainer clients, two are corporate and one is union. The firm also provided services to one corporate non-retainer client during the past year.

There are two professional consultants. Fees are payable in hard and soft dollars.

Clients include the United Food and Commercial Workers International.

William P. Deuchler, president and chief operating officer, and Robert F. Vandell, chairman and chief investment officer, are client contacts.

### Venture Economics Inc.

*16 Laurel Ave., P.O. Box 81348, Wellesley Hills, Mass. 02181; (617) 431-8100*

Venture Economics Inc. provides development of investment policies and objectives: U.S. manager evaluation and selection; and analysis of U.S. investment performance. The firm also provides consulting to refine investment criteria, research support, screening proprietary data bases and aggregate portfolio reports with industry benchmarks on investment status and performance. It is now developing performance measurement guidelines for venture capital funds.

It provides manager directories, research services, portfolio analysis and performance research to the investment management industry.

The firm has special expertise in venture capital investing.

Fees are payable in hard and soft dollars.

Linda Vincent, vice president, and Ted Clark, associate, are client contacts.

## W

### Wellesley Group Inc.

*800 South St., Waltham, Mass. 02154; (617) 891-3636*

Wellesley Group Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; U.S. and foreign performance measurement; and analysis of U.S. investment performance. The firm also provides master trust/master custodian searches.

It has special expertise in endowments and foundations.

Of the 44 retainer clients, 14 are corporate, two are public, two are union, 25 are endowments and three are foundations.

There are five professional consultants. Fees are payable in hard and soft dollars.

Clients include the Chicago Transit Authority, IBM, E.R. Carpenter and the University of Michigan.

Ned A. Joachimi, chairman, and Jon L. Prime, vice chairman, are client contacts.

### Wilshire Associates

*1299 Ocean Ave., Santa Monica, Calif. 90401; (213) 451-3051*

Wilshire Associates provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and measurement and analysis of U.S. and foreign investment performance.

The firm also provides consulting in venture capital; special equity (leveraged buy-outs); GICs; 401(k) analysis; FASB; master trustee and custodian selection; portfolio transaction analysis; benchmark portfolio design; specialized studies; and annual client seminars.

For the investment management industry, it offers equity management and analysis systems; fixed-income analysis; index funds; asset allocation systems; performance measurement; accounting systems; and master trust reporting.

Of the 70 retainer clients, 40 are corporate, 20 are public and 10 are endowments and foundations. The firm also provided services to one public non-retainer client during the past year.

There are 17 professional consultants. Fees are payable in hard and soft dollars.

Clients include White Consolidated Industries, Vulcan Materials, the University of Pittsburgh and the Pension Benefit Guaranty Corp.

Robert A. Garvy, senior vice president, is client contact.

### The World Markets Co.

*345 Park Ave., New York, N.Y. 10152; (212) 593-4747*

The World Markets Co., a subsidiary of Bankers Trust Co., provides foreign investment performance measurement and analysis. The firm also provides multicurrency accounting, valuation and performance evaluation services on a worldwide basis.

It offers multicurrency accounting, portfolio valuations and performance measurement and analysis to the investment management industry.

The firm has special expertise in multicurrency portfolios.

The firm provided services to 400 non-retainer clients during the past year.

There are 100 professional consultants. Fees are payable in hard and soft dollars.

P. Wendy Howard, U.S. marketing manager, is client contact.

### Wyatt Asset Services Inc.

*80 William St., Wellesley Hills, Mass. 02181; (617) 237-3900*

Wyatt Asset Services Inc., a subsidiary of The Wyatt Co., provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis. The firm also provides asset/liability modeling and matching.

The firm has special expertise in FASB 87 analysis of pension plans and corporate earnings impact.

Of the 31 retainer clients, 28 are corporate, one is public and two are unions. The firm also provided services to 49 non-retainer clients during the past year, of which 43 were corporate, three were public and three, union.

There are 12 professional consultants. Fees are payable in hard dollars.

Asghar Alam, consultant, is client contact.

## Z

### Zacks Investment Research

*2 N. Riverside Plaza, Chicago, Ill. 60606; (312) 559-9405*

Zacks Investment Research provides U.S. performance measurement and analysis. It also offers a software system for sponsors to monitor portfolio performance of three to 100 managers, and normal portfolio performance.

It provides LAN-based equity research software systems to the investment management industry.

The firm has special expertise in the use of earnings-per-share forecasts in

Continued on page 59

# Add value . . .

*Continued from page 31*

surement as a separate service as well as part of a consulting package.

His firm is part of the Wilshire Cooperative Universe Service, through which 14 small consulting firms share data on 1,200 portfolios. "It offers me and my clients the ability to tap Wilshire Trust Services division for portfolio performance calculations, data processing and programming expertise," said Mr. Holbein.

"This is a new and growing system that allows us to add new information and develop new approaches as the clients' needs change. The dynamic and growing nature of our performance measurement system is such that we can customize and adapt it to the specific needs of the plan sponsor to fit his unique situation rather than taking his information and giving him a generalized performance evaluation," said Mr. Holbein.

He and other smaller consultants claim the information they develop is as useful and as valid as that generated by the larger firms.

"There is no statistical difference between the data generated by SEI and that from the Wilshire Cooperative Universe," Mr. Holbein said. "The other side is that by using a system such as ours, working with Wilshire provides a double-check on the information. They enter and crunch the numbers to make sure nothing has fallen through the cracks."

Ron Jones, partner in the Lincolnshire, Ill., offices of Hewitt Associates and manager of the firm's investment services group, agreed plan executives have access to a wide range of performance measurement services, but that it is the professional counsel offered by Hewitt that makes the difference.

"We're not in the same business as some others," Mr. Jones said. "We view (performance evaluation) as the basis of an ongoing consulting relationship. We don't claim our numbers-crunching ability is any better than anyone. What we say is different about ourselves is that we are all investment professionals and do our consulting around the numbers . . . We are offering our professional capabilities rather than just numbers."

Robert Thomas, president of Performance Evaluation Resources Inc., New York, a subsidiary of Thomson McKinnon Inc., said performance measurement and comparison numbers are widely available, but the quality and usefulness of that information varies.

"There are only a limited number of calculations and measurements that can be applied and everyone has them. What sets them apart are the perceptions one brings to the business," Mr. Thomas said.

"Many services don't allow the plan sponsor to make a decision and know why. (The sponsor) should know and be satisfied enough with his managers to retain them, or know whether to terminate them because they haven't performed well, or to add an incremental manager to his group. Performance measurement is a report card: Did I do good or bad? If I didn't do as well as I wanted, do I understand why and should I do anything about it."

Nancy Goerdel, investment director at the $4.2 billion Employees Retirement System of Texas said the system uses Wilshire Associates, Santa Monica, Calif., as its consultant but hired the firm primarily for performance evaluation.

"Texas law requires us to use an external performance evaluation service," she said. "They (Wilshire) have worked with us as far as giving us updated reports. It is not a customized service, they use a standard format, but they provide us with quality information we use for our investment committee. They are able to give us a good custom benchmark on equities since we can own and hold stocks only in U.S. corporations that have a 10-year dividend record and no (over-the-counter) stocks." ■

# Buddy . . .

*Continued from page 31*

proposals to 30 firms," he said. "From that, we got 15 responses, and a committee of two was responsible for reviewing those proposals."

"We scour the universe and get them to come to us, and then we sort it all out," Mr. Cohee said.

SEI and Callan Associates Inc., San Francisco, were chosen to handle the city's two funds, the $211 million Police and Firemen's fund and the $259 million general fund.

"The business as a whole is volatile, and we wanted to have two opinions to back each other up, since the funds are almost identical and the two consultants ought to reach similar conclusions about both," he added.

Among Mr. Cohee's criteria are the firms' current workload, past experience and ability to design an appropriate work plan. He also looks at cost.

The $2.5 billion Ohio School Employees' Retirement System, Columbus, "started with as large a list as we could find of those we had heard about from other pension funds or we had read about," Robert Cowman, assistant director of investment.

"Then we looked at specifics and culled it down to four to six possibilities who were asked to make another presentation to the board, which made the final decision." ■

# Z continued . . .

*Continued from page 58*

the equity investment process.

Of the 400 retainer clients, 10 are corporate.

There are 18 professional consultants. Fees are payable in hard and soft dollars.

The firm offers index options and limited partnerships.

Leonard Zacks, president, is client contact.

*Pensions & Investment Age*'s Datebook section includes listings of upcoming events in the general pensions area, international investing, real estate, corporate finance and cash management.

If you are sponsoring a conference or meeting and wish it to be listed, send information to Sabine Schramm, *Pensions & Investment Age*, 740 N. Rush St., Chicago, Ill. 60611. You may phone Ms. Schramm at (312) 649-5407.

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**PIPER**

*The statistical data are extracted from Pensions & Investments' Performance Evaluation Report, a quarterly performance evaluation published by* Pensions & Investment Age. *PIPER details comparative performance data on equity and fixed-income funds at more than 200 banks and insurance companies. PIPER is compiled by Rogers, Casey & Barksdale Inc., Stamford Conn.*

# Stock leaders are optimistic

By Jacqueline Dutton

The managers of top-performing pooled equity funds said the storm of Black Monday and the subsequent gray days are clearing as stock prices are firming up.

With an optimistic outlook for the remainder of this quarter, they will maintain their heavy weightings in the capital and consumer-goods stocks that put them at the top of the Pensions & Investments' Performance Evaluation Report for periods ended Sept. 30.

PIPER measures the performance of 315 commingled equity funds managed by banks and insurance companies or their investment subsidiaries.

The United Bank of Denver's equity fund, managed by its investment arm, United Capital Management, Denver, was alone at the top for the third quarter, returning 18.8% compared with a second-place showing of 12.6% for the discretionary commingled fund of First Fidelity Bank, Newark, N.J., and 12% for the equity fund of Bessemer Trust Co., New York, equity fund.

Of the 315 equity funds ranked by PIPER, 30% beat the Standard & Poor's 500 stock index's return of 6.6% for the third quarter. The median manager returned 5.8%.

W. Lon Schreur, president of United Capital Management, said the fund was 75% invested in capital goods and basic industry stocks, which he said benefited from the dollar's decline and subsequent foreign sales.

Along with **Clark Equipment Co.**, **Caterpillar Inc.**, and **Ingersoll-Rand Co.**, the fund had positions in **Phelps Dodge Corp.**, **Asarco Inc.** and **Inland Steel Co.** The remainder of the fund was placed in special situation stocks, including **Long Island Lighting Co.**

Mr. Schreur said United Capital's holdings were hard hit at first during Black Monday, especially the heavy cyclicals, which were sensitive to fears of a recession. But at the beginning of November, he said, prices were beginning to rebound, and United managers are buying back some stocks they sold and are increasing their position in the heavy equipment stocks.

First Fidelity's 40-stock portfolio did well in the third quarter and 12 months despite a heavy cash position. John Walker, senior vice president, said the fund moved to 25% cash in May and stayed there through Oct. 19. Since the crash, cash was increased to 32%, and will stay there until the dust settles.

The First Fidelity fund resembled those of other top PIPER funds in its bias toward basic industry stocks such as **Caterpillar**, **Combustion Engineering Inc.** and **Koppers Co. Inc.** Consumer-goods stocks are also favored by First Fidelity, which had positions in **Archer Daniels Midland Co.**, **Interco Inc.** and **Firestone Tire & Rubber Co.**

Mr. Walker said the fund is adding to **Wolverine Technologies Inc.**, and is considering stocks such as **Duke Power Co.**, **Aetna Life and Casualty Co.** and **Johnson & Johnson**.

Greg Clark and Stanley Nabi, managers of Bessemer Trust's $200 million common trust equity fund, said the fund is recovering from its Black Monday losses and they are reducing cash to pick up additional current holdings at bargain prices.

The fund, which normally holds 37 stocks, seeks undervalued and unrecognized stocks to put the portfolio in a defensive position. Mr. Clark, executive vice president-U.S. equity investments, said these were the stocks other investors were moving into as the market started on its downslide in late August.

The largest positions were in **Eastman Kodak Co.** and **General Electric Co.** The diversified fund also included other companies with good earnings momentum in a market that became very much earnings-driven, ac-

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# Bond winners shorten terms

By Fred Williams

Fixed-income portfolio managers who shortened the maturities of their holdings were top performers in the Pensions & Investments' Performance Evaluation Report universe for the third quarter.

Short- and intermediate-term funds dominate the third-quarter PIPER results as astute portfolio managers turned more defensive in a bear market for bonds.

For the three- and 12-month periods ended Sept. 30, the Shearson Lehman Government/Corporate bond index returned −2.9% and −0.4% respectively. The median PIPER return was −2.1% for the quarter and 1.2% for the one-year period.

First National Bank of Elgin, Ill., had two bond funds in the top decile for the quarter and the year ended Sept. 30. The bank's Bond Fund D finished second for the quarter with a return of 1.4% and second for the year at 5.9%. Its D1 fund finished fifth for the quarter with a return of 1.4% and 11th for the 12 months with 5.8%.

The $4 million Fund D is made up of U.S. Treasury instruments only; the $10 million D1 fund contains a mixture of Treasuries and corporate bonds, said William Palmer, trust investment officer.

"We vary the maturity levels in the funds depending on our outlook for interest rates. We have been negative on rates and have been short in both funds. The average maturities were moved to under one year in both funds," said Mr. Palmer. "We moved there aggressively in early 1986."

The defensive bond fund at Hawaiian Trust Co., Honolulu, finished on top for the quarter with a return of 2.2% and second for the 12 months with 8.9%.

William Barton, chief investment officer at Hawaiian, said the $75 million fund contains mostly guaranteed investment contracts and about 15% in short-term cash equivalents.

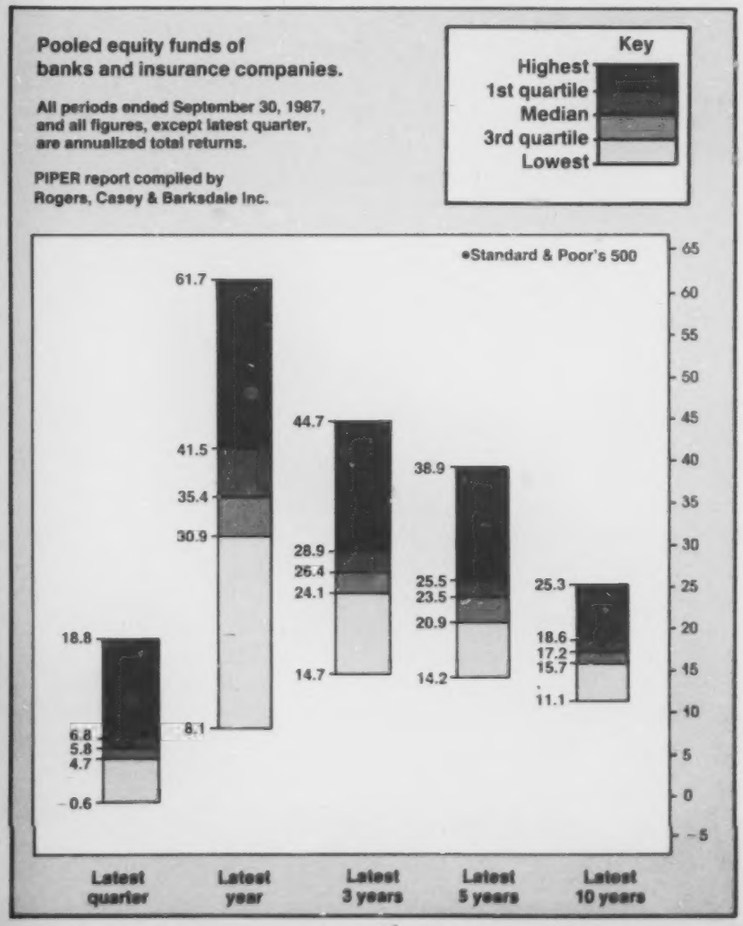
The fund uses "collapsible" GICs, which can be redeemed on a six-month notice to the insurance carriers.

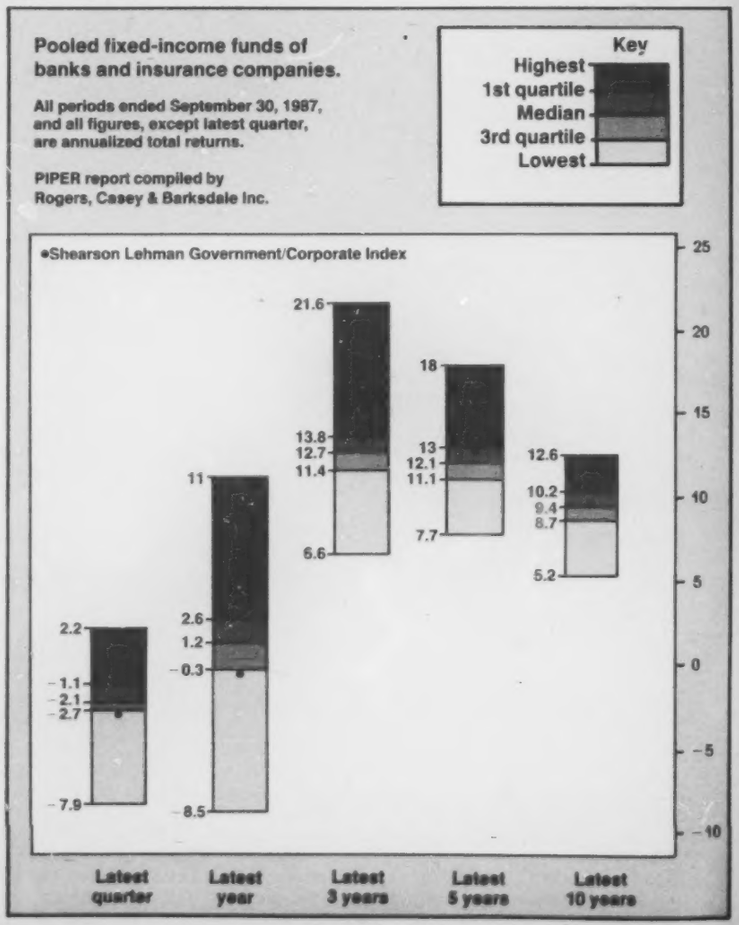
"The fund is structured to maximize yield as much as possible while reducing volatility . . . We use it as a core in our asset allocation for pension funds," said Mr. Barton.

He said the maximum maturity of any contract in the fund is five years. The fund is actively managed by adjusting maturities "depending on what we see as the most efficient yield." The average maturity of the fund now is 2.5 years, he said.

The other top performing funds for the quarter were Wilmington Trust Co., Wilmington, Del., 1.4%,

*Continued on page 68*



## Top quartile commingled fixed-income funds

### 3-month returns

| | % |
|---|---|
| Hawaiian Trust (Defens.) | 2.2 |
| First of Elgin (D), Ill. | 1.4 |
| Wilmington Trust, Del. | 1.4 |
| First of Neenah, Wis. | 1.4 |
| First of Elgin (D1), Ill. | 1.4 |
| Trustmark Nat'l, Miss. | 1.4 |
| Wheeling Dollar Bank, W. Va. | 1.3 |
| First Alabama, Mobile | 1.1 |
| Chase Manhattan (Short-inter.) | 0.9 |
| Hibernia Nat'l, La. | 0.7 |
| Sunburst Bank, Mich. | 0.6 |
| AmSouth (Ltd. mat.) | 0.5 |
| Dauphin Deposit (Short term), Pa. | 0.5 |
| Mid-State Bancorp, Pa. | 0.5 |
| Sanwa Bank (C), Calif. | 0.5 |
| Commerce Union, Tenn. | 0.4 |
| Signet Bank/Maryland (Short term) | 0.4 |
| United Virginia (Short term) | 0.3 |
| AmeriTrust (Reserve), Ohio | 0.3 |
| Mercantile Safe (Inter.), Md. | 0.3 |
| Harris Trust (Gain), Ill. | 0.2 |
| Central Bank Denver | 0.2 |
| Michigan Nat'l/Grand Rapids | 0.2 |
| Valley Fidelity, Tenn. | 0.2 |
| Shawmut Bank (Inter.), Mass. | 0.1 |
| Seattle Trust, Wash. | 0.1 |
| Texas Commerce (Low vol.) | 0.1 |
| Boatmen's FNB Kansas City, Mo. | 0.0 |
| Pioneer Bank, Ill. | −0.1 |
| Alaska Pacific Trust | −0.1 |
| United of Denver | −0.1 |
| First of Neenah (Lg. term), Wis. | −0.2 |
| First of Cincinnati (Inter.) | −0.2 |
| Manufacturers Detroit (Inter. H) | −0.3 |
| Associated Kellogg, Wis. | −0.3 |
| Columbus Bank & Trust, Ga. | −0.5 |
| First Union Bank (1), N.C. | −0.5 |
| Continental Bancorp, Pa. | −0.5 |
| Unibanctrust, Ill. | −0.6 |
| United Mercantile (A), Calif. | −0.6 |
| First Union Bank, N.C. | −0.6 |
| First in Wichita, Kan. | −0.7 |
| Citizens Fidelity (F), Ky. | −0.7 |
| Bank One Trust, Ohio | −0.7 |
| Central Fidelity, Va. | −0.7 |
| Bank One (Inter. mat.), Ind. | −0.8 |
| First of Maryland | −0.8 |
| Prudential (VCA 8) | −0.8 |
| First Wisconsin Trust (Passive) | −0.8 |
| First Interstate of Oklahoma | −0.8 |
| Greeley Nat'l, Colo. | −0.8 |
| Jefferson Trust (Inc.), Ill. | −0.9 |
| Bank of Tokyo (Inter.), N.Y. | −0.9 |
| Central Bank Monroe, La. | −0.9 |
| EF Hutton Trust (Govt. B), | −0.9 |
| Old Kent, Mich. | −0.9 |
| Home Life, N.Y. | −0.9 |
| First Fidelity (Inter.), N.J. | −1.0 |
| Texas American Bank | −1.1 |
| Bankers Trust (B), N.Y. | −1.1 |
| United Virginia Bank (5821) | −1.1 |
| First Nat'l Lincoln, Neb. | −1.1 |
| Mercantile Safe, Md. | −1.1 |
| Southtrust Bank, Ala. | −1.1 |
| Sovran Bank (Inst.), Va. | −1.1 |
| Valley Nat'l (II), Ariz. | −1.1 |
| **Shearson Lehman G/C Index** | **−2.9** |

### 1-year returns

| | % |
|---|---|
| Sunburst Bank, Mich. | 11.0 |
| Hawaiian Trust (Defensive) | 8.9 |
| First Alabama, Mobile | 8.2 |
| Sanwa Bank (C), Calif. | 7.5 |
| Trustmark Nat'l, Miss. | 7.2 |
| Wheeling Dollar Bank, W. Va. | 7.0 |
| First of Neenah, Wis. | 6.8 |
| Mid-State Bancorp, Pa. | 6.8 |
| HT Investors, R.I. | 6.4 |
| First of Elgin (D), Ill. | 5.9 |
| First of Elgin (D1), Ill. | 5.8 |
| Columbus Bank & Trust, Ga. | 5.7 |
| Dauphin Deposit (Short term), Pa. | 5.5 |
| AmSouth (Ltd. mat.), Ala. | 5.4 |
| Signet Bank/Maryland (Short term) | 5.2 |
| Chase Manhattan (Short-int.) | 5.2 |
| Sentry Life (Acct. D), Wis. | 5.1 |
| Delaware Trust Co. | 5.0 |
| Colonial American Nat'l, Va. | 4.8 |
| Valley Fidelity, Tenn. | 4.7 |
| Commerce Union, Tenn. | 4.6 |
| Central Fidelity, Va. | 4.6 |
| Alaska Pacific Trust | 4.4 |
| Michigan Nat'l/Grand Rapids | 4.4 |
| United Virginia Bank (Short term) | 4.4 |
| Central Bank Denver | 4.4 |
| Wilmington Trust, Del. | 4.3 |
| Seattle Trust | 4.2 |
| Mercantile Safe (Inter.), Md. | 4.1 |
| United of Denver | 4.1 |
| AmeriTrust (Reserve), Ohio | 4.1 |
| Mercantile Safe, Md. | 3.9 |
| First of Neenah (Lg. term), Wis. | 3.9 |
| Shawmut Bank (Inter.), Mass. | 3.8 |
| Texas Commerce (Low vol.) | 3.8 |

## Top fixed funds by size

### 1-year returns

#### Over $100 million

| | % |
|---|---|
| Chase Manhattan (Short-inter.) | 5.2 |
| Prudential (VCA 8), N.J. | 3.4 |
| Pacific Mutual, Calif. | 3.1 |
| Harris Trust, Ill. | 2.6 |
| Sovran Bank (Inst.), Va. | 2.6 |
| First of Chicago, Ill. | 2.2 |
| Texas Commerce (Act. mgd.) | 2.2 |
| Morgan Guaranty, N.Y. | 1.7 |
| Old Kent, Mich. | 1.7 |
| Lincoln Nat'l Pens. (Corp.), Ind. | 1.4 |

#### $50 million to $100 million

| | % |
|---|---|
| Hawaiian Trust (Defensive) | 8.9 |
| Trustmark Nat'l, Miss. | 7.2 |
| AmSouth (Ltd. mat.), Ala. | 5.4 |
| Mercantile Safe (Inter.), Md. | 4.1 |
| AmeriTrust (Reserve), Ohio | 4.1 |
| Texas Commerce (Low vol.) | 3.8 |
| Harris Trust (Gain), Ill. | 3.5 |
| Manufacturers Detroit (Inter. H) | 3.4 |
| Bank One Trust (Invt.), Ohio | 3.1 |
| Continental Bancorp, Pa. | 3.1 |

#### $10 million to $50 million

| | % |
|---|---|
| First Alabama, Mobile | 8.2 |
| Sanwa Bank (C), Calif. | 7.5 |
| Mid-State Bankcorp, Pa. | 6.8 |
| HT Investors, R.I. | 6.4 |
| First of Elgin (D1), Ill. | 5.8 |
| Columbus Bank Trust, Ga. | 5.7 |
| Dauphin Deposit (Short term) | 5.5 |
| Delaware Trust Co. | 5.0 |
| Valley Fidelity, Tenn. | 4.7 |
| Commerce Union, Tenn. | 4.6 |

#### Under $10 million

| | % |
|---|---|
| Sunburst Bank, Mich. | 11.0 |
| Wheeling Dollar Bank, W. Va. | 7.0 |
| First of Neenah, Wis. | 6.8 |
| First of Elgin (D), Ill. | 5.9 |
| Signet Bank/Maryland (Short) | 5.2 |
| Sentry Life (Acct. D), Wis. | 5.1 |
| Colonial American Nat'l (Inc.) | 4.8 |
| Central Fidelity, Va. | 4.6 |
| Alaska Pacific Trust | 4.4 |
| United Mercantile (A), Calif. | 3.5 |

### 10-year returns

#### Over $100 million

| | % |
|---|---|
| Sovran Bank (Inst.), Va. | 12.2 |
| Texas Commerce (Act. mgd.) | 11.5 |
| Pacific Mutual, Calif. | 11.5 |
| Centerre Trust, Mo. | 11.3 |
| American Security, D.C. | 11.3 |
| Morgan Guaranty, N.Y. | 10.7 |
| John Hancock, Mass. | 10.3 |
| Mercantile Bank, Mo. | 10.1 |
| First of Chicago, Ill. | 9.9 |
| Wachovia Bank, N.C. | 9.9 |
| CIGNA (Act. mgd.), Conn. | 9.9 |

#### $50 million to $100 million

| | % |
|---|---|
| Hibernia Nat'l, La. | 11.5 |
| Life of Virginia | 11.4 |
| First Kentucky Trust (Ret. tr.) | 11.0 |
| AmeriTrust (Reserve), Ohio | 10.8 |
| Bankers Trust (B), N.Y. | 10.6 |
| Manufacturers Detroit | 10.6 |
| Trustmark Nat'l, Miss. | 10.2 |
| Bankers Trust (A), N.Y. | 10.1 |
| Citizens Fidelity (Tr. F), Ky. | 10.0 |
| First Fidelity (Inter.), N.J. | 10.0 |

#### $10 million to $50 million

| | % |
|---|---|
| United of Denver | 12.6 |
| Seafirst Bank, Wash. | 11.3 |
| Sanwa Bank (C), Calif. | 11.2 |
| First Wisconsin Nat'l Madison | 11.2 |
| First Interstate of California | 10.8 |
| First Interstate of Arizona | 10.8 |
| First Interstate of Denver | 10.8 |
| Commerce Union, Tenn. | 10.6 |
| Cullen Bank, Texas | 10.5 |
| United Virginia (Short term) | 10.4 |
| American Nat'l Bank, Tenn. | 10.4 |
| First of Neenah (Lg. term) | 10.4 |

#### Under $10 million

| | % |
|---|---|
| Central Fidelity, Va. | 11.0 |
| Colonial American Nat'l (Inc.) | 10.3 |
| Oregon Bank | 10.2 |
| Connecticut Nat'l Bank | 10.1 |
| First of Neenah (Inter.) | 10.0 |
| First Nat'l Lincoln, Neb. | 9.6 |
| Associated Manitowoc (H. inc.) | 9.6 |
| Greeley Nat'l, Colo. | 9.6 |
| Wheeling Dollar Bank, W. Va. | 9.6 |
| American Nat'l Bank, Ind. | 9.4 |
| Old Second Nat'l (HR 10), Ill. | 9.4 |

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| | |
|---|---|
| Texas American Bank | 3.8 |
| United Mercantile (A), Calif. | 3.5 |
| Harris Trust (Gain), Ill. | 3.5 |
| Manufacturers Detroit (Inter. H) | 3.4 |
| Prudential (VCA 8), N.J. | 3.4 |
| Summit Trust Co., N.J. | 3.4 |
| First Union Bank, N.C. | 3.4 |
| Unibanctrust, Ill. | 3.2 |
| Bank One Trust, Ohio | 3.1 |
| Boatmen's FNB Kansas City, Mo. | 3.1 |
| Continental Bancorp, Pa. | 3.1 |
| Associated Kellogg, Wis. | 3.1 |
| Mutual of New York (Priv. place) | 3.1 |
| Pacific Mutual, Calif. | 3.1 |
| Bankers Trust (B), N.Y. | 3.0 |
| Hibernia Nat'l, La. | 3.0 |
| First Variable Life, Ariz. | 2.9 |
| Cullen Bank, Texas | 2.9 |
| Greeley Nat'l, Colo. | 2.9 |
| Chase Manhattan (A), N.Y. | 2.7 |
| First Interstate of Arizona | 2.7 |
| Jefferson Trust (CT), Ill. | 2.6 |
| General American (Acct. 9), Mo. | 2.6 |
| Union Nat'l Wichita, Kan. | 2.6 |
| Central Bank Monroe, La. | 2.6 |
| Bank One (Inter. mat.), Ind. | 2.6 |
| Harris Trust, Ill. | 2.6 |
| Sovran Bank (Inst.), Va. | 2.6 |
| **Shearson Lehman G/C Index** | **-0.4** |

### 5-year returns

| | % |
|---|---|
| United of Denver | 18.0 |
| Delaware Trust Co. | 16.5 |
| Sunburst Bank, Mich. | 16.3 |
| First Variable Life, Ark. | 15.8 |
| Sanwa Bank (C), Calif. | 15.5 |
| Central Fidelity, Va. | 15.3 |
| First Interstate of Denver | 15.2 |
| IAA Trust Co. (B), Ill. | 15.0 |
| First Alabama, Mobile | 15.0 |
| Life of Virginia | 14.9 |
| Beverly Bank, Ill. | 14.8 |
| Centerre Trust, Mo. | 14.8 |
| First Interstate of Arizona | 14.8 |
| Mutual of New York (Priv. place) | 14.6 |
| Connecticut Nat'l Bank | 14.6 |
| First Wisconsin Nat'l Madison | 14.5 |
| Colonial American Nat'l, Va. | 14.5 |
| First Kentucky Trust (Ret. tr.) | 14.4 |
| First of Chicago (Dollar fixed) | 14.2 |
| Colorado Nat'l Bank | 14.2 |
| Sovran Bank (Inst.), Va. | 14.2 |
| John Hancock, Mass. | 14.1 |
| Citicorp, N.Y. | 14.0 |
| Society Nat'l, Ohio | 13.9 |
| Key Trust Co., N.Y. | 13.9 |
| First Variable Life (H.Q.), Ark. | 13.9 |
| Pacific Mutual, Calif. | 13.8 |
| Morgan Guaranty, N.Y. | 13.8 |
| First of Chicago | 13.8 |
| Columbus Bank & Trust, Ga. | 13.7 |
| First of Neenah, Wis. | 13.7 |
| First Interstate California | 13.6 |
| AmSouth, Ala. | 13.6 |
| American Security, D.C. | 13.5 |
| CIGNA (Inter.-term), Conn. | 13.5 |
| First of Omaha (C), Neb. | 13.4 |
| Liberty Nat'l, Ky | 13.4 |
| Marine Midland, N.Y. | 13.3 |
| General American (Acct. 9), Mo. | 13.2 |
| HT Investors, R.I. | 13.2 |
| Associated Manitowoc, Wis. | 13.2 |
| CIGNA (Act. mgd.), Conn. | 13.2 |
| Travelers (Accct. P), Conn. | 13.2 |
| Toledo Trust, Ohio | 13.1 |
| Travelers (Acct. D), Conn. | 13.1 |
| Hamilton Bank, Pa. | 13.1 |
| Massachusetts Mutual | 13.1 |
| Northern Trust, Ill. | 13.0 |
| Norstar Trust Co., N.Y. | 13.0 |
| State Street Bank, Mass. | 13.0 |
| Harris Trust, Ill. | 13.0 |
| **Shearson Lehman G/C Index** | **12.8** |

### 10-year returns

| | % |
|---|---|
| United of Denver | 12.6 |
| Sovran Bank (Inst.), Va. | 12.2 |
| Beverly Bank, Ill. | 11.8 |
| Fidelity Bank, Pa. | 11.6 |
| Texas Commerce (Act. mgd.) | 11.5 |
| Hibernia Nat'l, La. | 11.5 |
| Pacific Mutual, Calif. | 11.5 |
| Life of Virginia | 11.4 |
| Centerre Trust, Mo. | 11.3 |
| American Security, D.C. | 11.3 |
| Seafirst Bank, Wash. | 11.3 |
| Sanwa Bank (C), Calif. | 11.2 |
| First Wisconsin Nat'l Madison | 11.2 |
| Central Fidelity, Va. | 11.0 |
| First Jersey Nat'l, N.J. | 11.0 |
| First Kentucky Trust (Ret. tr.) | 11.0 |
| AmeriTrust (Reserve), Ohio | 10.8 |
| First Interstate of California | 10.8 |
| First Interstate of Arizona | 10.8 |
| First Interstate of Denver | 10.8 |
| Morgan Guaranty, N.Y. | 10.7 |
| Bankers Trust (B), N.Y. | 10.6 |
| Manufacturers Detroit | 10.6 |
| Commerce Union, Tenn. | 10.6 |
| Bank of New England, Mass. | 10.6 |
| Manufacturers Hanover, N.Y. | 10.6 |
| Cullen Bank, Texas | 10.5 |
| United Virginia Bank (Short term) | 10.4 |
| American Nat'l Bank, Tenn. | 10.4 |
| First of Neenah (Long term), Wis. | 10.4 |
| John Hancock, Mass. | 10.3 |
| Colonial American Nat'l (Inc.), Va. | 10.3 |
| Toledo Trust, Ohio | 10.3 |
| Jefferson Trust (Inc.), Ill. | 10.3 |
| First of Maryland | 10.2 |
| Trustmark Nat'l, Miss. | 10.2 |
| First Bank of Milwaukee | 10.2 |
| Indiana Nat'l Bank | 10.2 |
| Oregon Bank | 10.2 |
| Citicorp, N.Y. | 10.2 |
| **Shearson Lehman G/C Index** | **9.7** |

## Top quartile commingled equity funds

### 3-month returns

| | % |
|---|---|
| United of Denver | 18.8 |
| First Fidelity (Discret.), N.J. | 12.6 |
| Bessemer Trust, N.Y. | 12.0 |
| California First Bank | 11.9 |
| Chase Manhattan (B), N.Y. | 11.1 |
| Associated Manitowoc, Wis. | 10.3 |
| Citicorp (Integrated), N.Y. | 10.3 |
| Merchants Nat'l (2), Ind. | 10.3 |
| NCNB Nat'l Bank, N.C. | 10.2 |
| Northern Trust (Divers.), Ill. | 10.2 |
| American Nat'l Bank, Tenn. | 9.8 |
| First Alabama, Mobile | 9.4 |
| Confederation Life, Ontario | 9.1 |
| Metropolitan Life (No. 40), N.Y. | 9.0 |
| First City Nat'l Houston | 9.0 |
| Wachovia Bank (Mgmt.), N.C. | 8.9 |
| Mercantile Bank, Mo. | 8.8 |
| Bank of Tokyo, N.Y. | 8.8 |
| Valley Nat'l (I), Ariz. | 8.8 |
| EF Hutton Trust (A), Del. | 8.7 |
| Lincoln Nat'l Pens. (Select), Ind. | 8.7 |
| Principal Mutual Life, Iowa | 8.7 |
| Allied Bank, Texas | 8.5 |
| Aetna Life & Casualty, Conn. | 8.4 |
| Merchants Nat'l (I), Ind. | 8.3 |
| Branch Bank & Trust, N.C. | 8.2 |
| Chase Investors (Index), N.Y. | 8.2 |
| CIGNA Corp. (A), Conn. | 8.1 |
| Pioneer Bank, Ill. | 8.1 |
| Puget Sound Nat'l, Wash. | 8.1 |
| EF Hutton Trust (2), Del. | 8.1 |
| Norstar Trust Co., N.Y. | 8.0 |
| H.T. Investors, R.I. | 7.8 |
| Continental Bancorp, Pa. | 7.8 |
| Boston Safe Deposit, Mass. | 7.8 |
| State Street (Matrix syn.), Mass. | 7.8 |
| First Jersey Nat'l, N.J. | 7.7 |
| Planters Nat'l (B), N.C. | 7.6 |
| Greeley Nat'l, Colo. | 7.6 |
| Sun Bank, Fla. | 7.5 |
| Wachovia Bank, N.C. | 7.5 |
| First Bank Milwaukee, Wis. | 7.5 |
| Penn Mutual Life (Acct. A), Pa. | 7.5 |
| First of Neenah, Wis. | 7.5 |
| Philadelphia Nat'l | 7.4 |
| First Interstate Billings, Mont. | 7.4 |
| Prudential (VCA-9), N.J. | 7.3 |
| First Interstate of Denver | 7.2 |
| First of Neenah, Wis. | 7.2 |
| Connecticut Nat'l Bank | 7.2 |
| Guardian Insurance (1), N.Y. | 7.2 |
| State Street Bank, Mass. | 7.2 |
| Mutual of New York (Growth) | 7.1 |
| Connecticut Bank & Trust | 7.1 |
| First Security Nat'l (D), Ky. | 7.0 |
| Citizens & Southern, Ga. | 7.0 |
| John Hancock (1K), Mass. | 7.0 |
| Crown Life (US grp.), Ontario | 7.0 |
| Bankers Trust (Index), N.Y. | 6.9 |
| Summit Trust Co., N.J. | 6.9 |
| U.S. Nat'l of Oregon (Qualivest) | 6.9 |
| Connecticut Mutual Life (CM) | 6.8 |
| First Variable Life, Ariz. | 6.8 |
| General American (Index), Mo. | 6.8 |
| Imperial Trust Co., Calif. | 6.8 |
| **Standard & Poor's 500** | **6.6** |

### 1-year returns

| | % |
|---|---|
| United of Denver | 61.7 |
| California First Bank | 58.4 |
| Citicorp (Stockshift 200), N.Y. | 55.7 |
| First Fidelity (Discret.), N.J. | 55.3 |
| Sun Bank, Fla. | 53.5 |
| First City Nat'l Houston | 52.0 |
| Citicorp (Styleshift), N.Y. | 51.9 |
| Valley Nat'l (I), Ariz. | 51.3 |
| Citicorp (Integrated), N.Y. | 50.3 |
| First Alabama, Mobile | 50.1 |
| Lincoln Nat'l Pens. (Select), Ind. | 49.9 |
| Puget Sound Nat'l, Wash. | 49.3 |
| Principal Mutual Life, Iowa | 49.2 |
| Norstar Trust Co., N.Y. | 48.6 |
| Summit Trust Co., N.J. | 48.4 |
| American Nat'l Bank, Tenn. | 48.4 |


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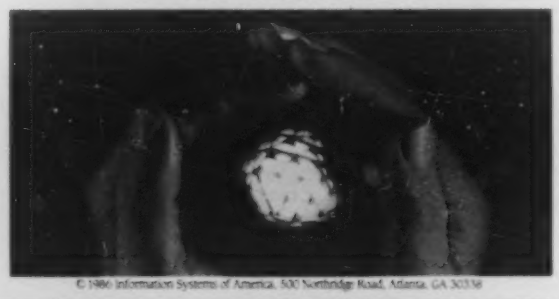

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## Top equity funds by size

### 1-year returns

### Over $100 million

| | % |
|---|---|
| Sun Bank, Fla. | 53.5 |
| Principal Mutual Life, Iowa | 49.2 |
| NCNB Nat'l Bank, N.C. | 47.7 |
| Lincoln Nat'l Pens. (Gro.), Ind. | 47.3 |
| Bessemer Trust, N.Y. | 47.0 |
| Philadelphia Nat'l | 46.0 |
| Prudential (VCA-9), N.J. | 44.3 |
| Chase Manhattan (B), N.Y. | 44.0 |
| Texas Commerce (Divers.) | 43.7 |
| Travelers (Sep. acct.), Conn. | 43.6 |
| Bankers Trust (Index), N.Y. | 43.6 |

### $50 million to $100 million

| | % |
|---|---|
| First City Nat'l Houston | 52.0 |
| Lincoln Nat'l Pens. (Select) | 49.9 |
| Norstar Trust Co., N.Y. | 48.6 |
| Wachovia Bank, N.C. | 42.8 |
| Society Nat'l (Rel. value), Ohio | 42.3 |
| First Kentucky Trust (Ret. tr.) | 41.0 |
| Pacific Mutual, Calif. | 40.9 |
| Minnesota Mutual (Acct. C) | 40.7 |
| Mercantile Bank (Coll.), Mo. | 39.0 |
| Connecticut Nat'l Bank | 38.5 |

### $10 million to $50 million

| | % |
|---|---|
| United of Denver | 61.7 |
| California First Bank | 58.4 |
| First Fidelity (Discret.), N.J. | 55.3 |
| Valley Nat'l (i), Ariz. | 51.3 |
| First Alabama, Mobile | 50.1 |
| Summit Trust Co., N.J. | 48.4 |
| American Nat'l Bank, Tenn. | 48.4 |
| Wachovia Bank (Mgmt.), N.C. | 48.1 |
| Southtrust Bank, Ala. | 46.0 |
| First of Toledo, Ohio | 44.9 |

### Under $10 million

| | % |
|---|---|
| Puget Sound Nat'l, Wash. | 49.3 |
| First Illinois (Corp.) | 46.0 |
| Wellington Trust (Divers. gro.) | 44.8 |
| Irving Trust, N.Y. | 44.2 |
| EF Hutton Trust (1), Del. | 43.3 |
| Fidelity Mgmt. (Earn. gro.) | 42.1 |
| Signet Bank/Maryland (D) | 39.0 |
| Boston Safe Deposit | 37.3 |
| Oregon Bank | 35.1 |
| First of Neenah, Wis. | 34.4 |

### 10-year returns

### Over $100 million

| | % |
|---|---|
| Manufacturers Life, Ontario | 25.3 |
| Sun Bank, Fla. | 24.9 |
| Bessemer Trust, N.Y. | 21.6 |
| U.S. Nat'l/Oregon (Qualivest) | 21.2 |
| Principal Mutual Life, Iowa | 20.8 |
| Philadelphia Nat'l | 20.8 |
| Provident Nat'l, Pa. | 20.5 |
| American Nat'l Chicago (Act.) | 20.5 |
| Continental Bancorp, Pa. | 20.4 |
| Texas Commerce (Divers.) | 20.3 |

### $50 million to $100 million

| | % |
|---|---|
| First Interstate of Denver | 21.8 |
| Norstar Trust Co. N.Y. | 19.4 |
| First Fidelity Bank, N.J. | 19.0 |
| First City Nat'l Houston | 18.8 |
| AmSouth, Ala. | 18.3 |
| Phoenix Mutual, Conn. | 18.0 |
| Mercantile Safe, Md. | 17.8 |
| First Kentucky (Ret. tr.) | 17.8 |
| Mercantile Bank (Coll.), Mo. | 17.8 |
| Society Nat'l (Rel. value), Ohio | 17.6 |

### $10 million to $50 million

| | % |
|---|---|
| Guardian Ins. (Acct. 1), N.Y. | 22.7 |
| Citizens Chillicothe (Emp. B) | 22.7 |
| First Trust Corp., Colo. | 21.2 |
| Confederation Life, Ontario | 21.0 |
| First Interstate/Oklahoma | 20.7 |
| United of Denver | 20.7 |
| U.S. Nat'l/Galveston, Texas | 20.1 |
| Nationwide Life Ins., Ohio | 20.0 |
| First of Omaha (D), Neb. | 19.9 |
| Home Life, N.Y. | 19.8 |

### Under $10 million

| | % |
|---|---|
| First of Neenah, Wis. | 18.4 |
| Puget Sound Nat'l, Wash. | 17.9 |
| Irving Trust, N.Y. | 17.6 |
| Merchants Nat'l (2), Ind. | 17.3 |
| Signet Bank/Maryland (D) | 17.2 |
| Boston Safe Deposit, Mass. | 16.4 |
| Oregon Bank | 15.9 |
| American Nat'l Bank (Gro.) | 15.3 |
| American Nat'l Bank, Ind. | 14.7 |
| First Nat'l of Tulsa, Okla. | 14.4 |
| Wachovia Bank (Mgmt), N.C. | 48.1 |
| NCNB Nat'l Bank, N.C. | 47.7 |
| Chase Investors (Index), N.Y. | 47.7 |
| Lincoln Nat'l Pens. (Growth), Ind. | 47.3 |
| Bessemer Trust, N.Y. | 47.0 |
| Southtrust Bank, Ala. | 46.0 |
| Philadelphia Nat'l | 46.0 |
| First Illinois (Corp.) | 46.0 |
| Citicorp (Indexplus), N.Y. | 45.7 |
| Nat'l City Cleveland, Ohio | 45.5 |
| First of Toledo, Ohio | 44.9 |
| Wellington Trust (Divers. gro.) | 44.8 |
| Allied Bank, Texas | 44.5 |
| First Illinois (Personal) | 44.4 |
| Prudential (VCA-9), N.J. | 44.3 |
| Irving Trust, N.Y. | 44.2 |
| Chase Manhattan (B), N.Y. | 44.0 |
| General American (Index), Mo. | 43.8 |
| Texas Commerce (Divers.) | 43.7 |
| Travelers (Sep. acct.), Conn. | 43.6 |
| Bankers Trust (Index), N.Y. | 43.6 |
| Chase Investors (CMB index) | 43.6 |
| **Standard & Poor's 500** | **43.5** |
| First Interstate/California (Index) | 43.4 |
| American Nat'l, Chicago (Index) | 43.4 |
| State Street (S&P Index), Mass. | 43.3 |
| Citicorp, N.Y. | 43.3 |
| EF Hutton Trust (1), Del. | 43.3 |
| Bank of America (Index), Calif. | 43.1 |
| Morgan Guaranty, N.Y. | 43.1 |
| First Wisconsin Trust (Index) | 43.1 |
| Mutual of New York (Growth) | 43.0 |
| Northern Trust (Divers.), Ill. | 42.9 |
| South Carolina Nat'l | 42.8 |
| Wachovia Bank, N.C. | 42.8 |
| John Hancock (1K), Mass. | 42.7 |
| Citizens Chillicothe (B), Mo. | 42.6 |
| Hibernia Nat'l, La. | 42.5 |
| Mellon Bank, Pa. | 42.5 |
| Associated Manitowoc, Wis. | 42.3 |
| Society Nat'l (Rel. value), Ohio | 42.3 |
| Fidelity Mgmt. (Earn. gro.) | 42.1 |
| IDS Trust Co. (A), Minn. | 42.1 |
| Connecticut Mutual Life (CM) | 42.0 |
| Metropolitan Life (No. 40), N.Y. | 42.0 |
| Hawaiian Trust | 41.7 |
| Morgan Guaranty, N.Y. | 41.6 |
| Citicorp (Stockshift 100), N.Y. | 41.5 |

### 5-year returns

| | % |
|---|---|
| Sun Bank, Fla. | 38.9 |
| Bank/New England (Valuepath) | 30.3 |
| First Union Bank, N.C. | 29.9 |
| First RepublicBank, Texas | 29.1 |
| Guardian Ins. (Vari. acct. 1), N.Y. | 29.0 |
| Mellon Bank, Pa. | 28.9 |
| Morgan Guaranty (Lg. co.), N.Y. | 28.9 |
| Principal Mutual Life, Iowa | 28.8 |
| First Fidelity (Discret.), N.J. | 28.8 |
| Manufacturers Life, Ontario | 28.8 |
| First Interstate/Denver (Value) | 28.3 |
| Cullen Bank, Texas | 27.8 |
| College Ret. Equities Fund | 27.8 |
| First of America, Mich. | 27.7 |
| First Alabama, Mobile | 27.6 |
| Provident Nat'l, Pa. | 27.5 |
| First Interstate of Oregon | 27.4 |
| Connecticut Mutual Life (CM) | 27.3 |
| John Hancock (1K), Mass. | 27.3 |
| Pioneer Bank, Ill. | 27.3 |
| United of Denver | 27.2 |
| Mercantile Bank (Coll.), Mo. | 27.1 |
| John Hancock (1L), Mass. | 27.0 |
| Bankers Trust (Index), N.Y. | 26.9 |
| Manufacturers Detroit | 26.9 |
| Continental Bancorp, Pa. | 26.9 |
| **Standard & Poor's 500** | **26.8** |
| American Nat'l Chicago (Index) | 26.8 |
| Chase Investors (CMB index) | 26.8 |
| American Nat'l Chicago (Active) | 26.7 |
| Nationwide Life Ins., Ohio | 26.7 |
| State Street Bank (Index), Mass. | 26.7 |
| Irving Trust, N.Y. | 26.6 |
| Philadelphia Nat'l | 26.6 |
| New Jersey Nat'l | 26.5 |
| Norstar Trust Co., N.Y. | 26.5 |
| First Trust Corp., Colo. | 26.5 |
| First of Neenah, Wis. | 26.4 |
| State Street Bank, Mass. | 26.3 |
| First Fidelity Bank, N.J. | 26.2 |
| Fidelity Mgmt. (Income), Mass. | 26.2 |
| Valley Nat'l (I), Ariz. | 26.2 |
| First Variable Life, Ark. | 26.2 |
| First of Omaha (D), Neb. | 26.1 |
| Morgan Guaranty, N.Y. | 26.0 |
| Society Nat'l (Rel. value), Ohio | 26.0 |
| First of Neenah, Wis. | 26.0 |
| Frost Nat'l (A), Texas | 25.8 |
| Mutual of New York (Inc.) | 25.8 |
| Citicorp, N.Y. | 25.6 |
| Penn Mutual Life (Acct. A), Pa. | 25.5 |
| Oregon Bank | 25.5 |
| Prudential (PRIFORM) | 25.5 |
| Signet Trust Co., Va. | 25.5 |
| Texas Commerce (Divers.) | 25.5 |
| Nat'l Bank of Commerce, Tenn. | 25.5 |

### 10-year returns

| | % |
|---|---|
| Manufacturers Life, Ontario | 25.3 |

# Shorten . . .

*Continued from page 63*

and First National Bank of Neenah, Wis., 1.4%.

A newcomer to the PIPER charts, Sunburst Bank of Jackson, Miss., finished in the top spot for the year ended Sept. 30 with a return of 11%. Sunburst's $1.5 million fund also finished second for the three-year period with 21.2%; third for five years with 16.3%; and in the top decile for the quarter with 0.6%.

"Things worked out for us," said Ashby Foote, chief investment officer at Sunburst.

"Our overall strategy is to look at where inflation is going and the risk-reward (ratios) in fixed-income instruments," he said.

"In the last 12 months or so we have shifted out of medium-term, zero-coupon bonds because we didn't feel the rewards were acceptable and shifted to convertible bonds. That has paid off for us in the last 12 months. We still feel convertibles offer good opportunities although some of the valuations don't look real good at the present time," he said.

For the longer periods, Mr. Foote said, "rather than looking at fiscal and monetary trends, we looked at inflation and felt longer maturities were the best and we could take advantage of the yields because we didn't fear inflation rising at all.

"As bond yields came down in 1986, we were able to generate some good returns. When long bonds were down to 7% to 8%, we felt the risk-reward of convertibles made more sense than long-term bonds. It allowed us to avoid some of the damage which has occurred in the bond market brought on by higher rates," he said.

Coming in third for the year behind Sunburst and Hawaiian Trust was First Alabama Bank, Mobile, with 8.2%.

The mortgage fund of First National Bank, Neenah, finished in the top decile for the quarter and the year with returns of 1.4% and 6.8%.

Neil Braun, vice president and trust investment officer, said the $2.5 million fund is a mortgage-investment fund made up partly of local mortgages and GNMA instruments.

"The fund was started about five years ago with the idea of investing in local mortgages, single-family, owner-occupied properties. Mortgage rates were very attractive at the time and we felt it would also help the community," Mr. Braun said. "We had some trouble getting access to new mortgages and gradually shifted toward GNMA-type instruments as the mortgages were paid off. So the fund is kind of a mixture of those two items."

For the three-, five- and 10-year periods, United Bank of Denver finished in the top spot with compound annualized returns of 21.6%, 18% and 12.6%; the Shearson Lehman Government/Corporate bond index had annualized returns of 13.3%, 12.8% and 9.7% for the same periods, and the median PIPER fund was up 12.7%, 12.1% and 9.4%.

W. Lon Schreur, president and chief investment officer at United Capital Management, Denver, which manages the $35 million fund, said he shortened the average maturity of the fund to nearly 5.5 years in early 1986 from nearly 21 years, where it had been since 1981.

Mr. Schreur said the fund comprises mainly U.S. government securities, primarily direct obligations with some agency issues.

"We think the rally in the bond market is temporary and we're not extending maturities," he said. "We think interest rates will be higher in the next six months than they are today. We don't see any extending of maturities until mid-1988."

Following United of Denver and Sunburst in the three-year period were Centerre Trust Co., St. Louis, with an annualized 18%; Delaware Trust Co., Wilmington, 17.6%; and First Interstate Bank of Denver, 17.2%.

For the five-year period, United Bank of Denver was followed by Delaware Trust, with 16.5%; Sunburst at 16.3%; and First Variable Life Insurance Co., Little Rock, Ark., with a return of 15.8%.

Rebecca Garner, portfolio manager for First Variable, said the $3.5 million fund is conservatively managed, with a heavy weighting in high-yielding corporate bonds. But, she said, spreads between the bonds and U.S. Treasury instruments narrowed in September, resulting in the sale of about 15% of the portfolio.

"The bonds were not sold for credit reasons but for spread reasons," Ms. Gardner said. "The market got too rich and I intend to buy them back at the right time. This is a value-invested fund. I don't buy anything I'm not willing to hold over the long term."

Behind United of Denver in the 10 year period, were Sovran Bank, Richmond, Va., with a compound annualized return of 12.2% and Beverly Trust Co., Chicago, with an annualized 11.8%. ■

| | |
|---|---|
| Manufacturers Life, Ontario | 25.3 |
| Sun Bank, Fla. | 24.9 |
| Guardian Ins. (Vari. acct.1), N.Y. | 22.7 |
| Citizens Chillicothe (Emp. B), Mo. | 22.7 |
| First Union Bank, N.C. | 22.0 |
| First Interstate of Denver | 21.8 |
| Bessemer Trust, N.Y. | 21.6 |
| First Trust Corp., Colo. | 21.2 |
| U.S. Nat'l of Oregon (Qualivest) | 21.2 |
| Confederation Life, Ontario | 21.0 |
| Principal Mutual Life, Iowa | 20.8 |
| Philadelphia Nat'l | 20.8 |
| First Interstate/Oklahoma | 20.7 |
| United of Denver | 20.7 |
| Provident Nat'l, Pa. | 20.5 |
| American Nat'l Chicago (Active) | 20.5 |
| Continental Bancorp, Pa. | 20.4 |
| Texas Commerce (Divers.) | 20.3 |
| U.S. Nat'l/Galveston, Texas | 20.1 |
| Nationwide Life Ins., Ohio | 20.0 |
| Manufacturers Detroit | 20.0 |
| First of Omaha (D), Neb. | 19.9 |
| Home Life, N.Y. | 19.8 |
| Nat'l City Cleveland | 19.7 |
| Employers Life/Wausau (Acct.1) | 19.5 |
| First of America, Mich. | 19.5 |
| Norstar Trust Co., N.Y. | 19.4 |
| Aetna Life & Casualty, Conn. | 19.4 |
| First RepublicBank, Texas | 19.3 |
| Massachusetts Mutual | 19.2 |
| First Interstate of Oregon | 19.1 |
| Wheeling Dollar Bank, W.Va. | 19.1 |
| Bank of Tokyo, N.Y. | 19.1 |
| Signet Trust Co., Va. | 19.0 |
| First Fidelity Bank, N.J. | 19.0 |
| CIGNA Corp. (Acct. A), Conn. | 18.9 |
| First Variable Life, Ariz. | 18.9 |
| First City Nat'l Houston | 18.8 |
| Citicorp, N.Y. | 18.8 |
| Fifth Third Bank, Ohio | 18.7 |
| Penn Mutual Life (Acct.A), Pa. | 18.7 |
| First Interstate Washington | 18.6 |
| State Street Bank, Mass. | 18.6 |
| College Ret. Equities Fund | 18.6 |
| **Standard & Poor's 500** | **18.3** |

## Callan chosen by Georgia fund

ATLANTA — The $160 million Joint Municipal Employees' Retirement System hired Callan Associates Inc., Atlanta, to analyze investment performance and audit transactions, said Bill Avery, an adviser to the fund.

Previously, the fund had Merrill Lynch & Co., New York, do performance evaluation, and did transaction audits in-house. Callen was selected because of feelings it would provide better service. ■

BellSouth

# Stock leaders . . .

*Continued from page 63*

cording to Mr. Clark. Among those were **Loews Corp.**, **ITT Corp.**, **Seagram Co. Ltd.**, **Monsanto Co.**, **Irving Bank Co.** and **United Technologies Corp.**

Mr. Clark said after the recovery of some initial losses, the fund outperformed the S&P during the week of Oct. 19 by 200 basis points.

United of Denver's fund also was the best performer during the one-year period ended Sept. 30, with 61.7%, edging past California First Bank's investment trust equity fund, and Citicorp Investment Management's pooled asset allocation fund.

California First reaped an impressive 58.4% and Citicorp's "stock shift 200" fund was third at 55.7%, just squeaking past First Fidelity's 55.3%.

The S&P index was a difficult bogey to beat for the 12 months, as fewer than 20% of the managers were able to outperform the S&P's 43.5% return. The median fund returned 35.4%.

The California First Bank fund — which was managed by California First Capital Management, La Jolla, Calif., until the subsidiary was sold to its principals and became Wall Street Associates Oct. 1 (*Pensions & Investment Age*, Nov. 2) — is a diversified and actively driven fund with a bias toward blue-chip stocks, according to Edward Nay, a partner of Wall Street Associates. Since the sale, the assets have been moved into California First's trust department.

The fund has had heavy exposures to technology, specialty chemical, pollution control, capital-goods and drug and tobacco stocks. Those areas were favored for their strong earnings growth potential, Mr. Nay said. "The key criteria is earnings momentum."

Some of the best performers were **Georgia-Pacific Corp.** and **Vista Chemical Co.**, which he said had virtually no competition and explosive earnings in the polystyrene and polyurethane manufacturing arena. Mr. Nay expects pollution control stocks such as **Browning-Ferris Industries Inc.** to perform well in upcoming months, as federal waste clean-up funds are allocated in 1988.

But Clyde Power, a vice president of California First and the new manager of the fund, said the portfolio was badly bruised Oct. 19, sustaining losses slightly greater than the S&P, but just prior to the crash his department had moved heavy into cash. He does not expect the fund to change its positions noticeably during this quarter, but there might be a bigger commitment to semiconductor and computer stocks, such as **Motorola Inc.** and **Computer Factory**.

The $30 million Citicorp fund — an index-based market timing fund with a beta range from zero to 2 — performed well during the year because it was positioned well, said Charles DuBois, vice president of Citicorp Investment Management Inc., New York. Mr. Dubois said the fund had a beta of more than 1 during the fourth quarter of 1986 and the first quarter of 1987, which helped it do especially well.

Mr. DuBois said the fund operates like a full discretion asset allocation account, by allowing managers to trade in futures.

During the third quarter, the fund reduced its market exposure to take a more defensive position. The cash position varied from zero to 10%, but increased to 20% heading into Black Monday. The strategy paid off during the last weeks of October, as the fund did not suffer as much loss as the market did. He said the fund bettered the market indexes by roughly 500 basis points at that critical time.

In the long-term performance categories, the $400 million Sun Banks Inc. fund is becoming a fixture among the leaders in both three-year and five-year periods, with compound annualized returns of 44.7% and 38.9%, respectively.

Other top finishers in the three-year period were Puget Sound National Bank, Tacoma, Wash., whose fund returned a compound annualized 33.8%, and IDS Trust Co., Minneapolis, 33%. The funds were among the 20% to beat the S&P's annualized 29.4% return for the three-year period. The median PIPER manager returned 26.4%.

But in the five-year period, only 26 of the 206 funds tracked for that period could beat the S&P's 26.8% compound annualized return. Among those were The Bank of New England, Springfield, Mass., whose Valuepath fund was second only to the Orlando, Fla.-based Sun Bank's fund with an annualized 30.3% annualized return, and First Union Bank, Charlotte, N.C., slightly behind with 29.9%. The median manager returned 23.5%.

For the 10 years, Sun Bank's fund was topped only by the Toronto-based Manufacturers Life fund. Manufacturers Life returned an annualized 25.3% compared with 24.9% for Sun Banks. The Variable Account 1 equity fund of Guardian Insurance Co. of America, New York; and the employee investment fund of Citizens Bank and Trust Co., Chillicothe, Mo., were close behind with annualized returns of 22.7% each for the period.

First Union Bank, Bessemer Trust and United Bank of Denver also were in the top decile for 10-year results, with compound annualized returns of 22%, 21.6%, and 20.7% respectively.

The top 30% of managers running funds with a 10-year history outperformed the 10-year S&P figure of 18.3%, and the median manager returned a compound annualized 17.2%.

Tony Gray, president of Sun Banks Investment Management Group, said the fund stayed competitive in the third quarter by sticking with the same sectors it favored in the second: consumer goods, pharmaceutical and technology stocks.

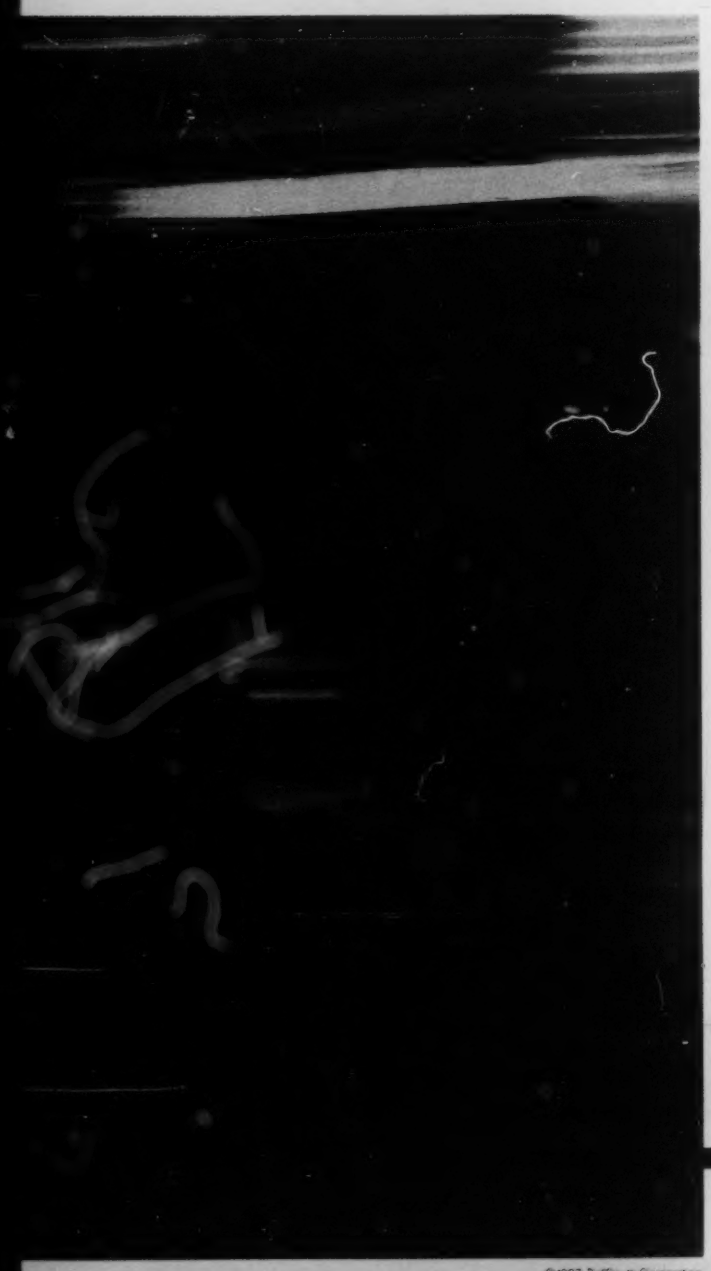
Some additions were made, however, in the energy and machinery sectors. Among the fund's picks in the third quarter were **CPC International Inc.**; **Ralston Purina Co.**; **Quaker Oats Co.**; **Gillette Co.**; **Apple Computer Inc.**; and **Atlantic Richfield Co**.

Mr. Gray said the fund did not do as poorly as the market during the month of October; it outperformed the S&P by three percentage points.

The stocks that fared best in the crash, he said, were **Amoco Corp.**, **Atlantic Richfield,** and **Bristol-Myers Corp.** because of "the feeling that their earnings would hold up even if we were to have a moderate recession."

The hardest hit, he said, were the consumer goods, but that quickly changed. **Johnson & Johnson**, **Kraft Inc.** and **Merck & Co. Inc.** came back strong after sustaining blows on Black Monday and the two days after.

Starting Nov. 2, he said Sun Banks bought transportation stocks, which he said are at bargain prices, even by recession-period standards. ■

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# Corporate Finance

# New chapter for 'junk' debt

## Market drop stops new issues

By Brad Rudin

NEW YORK — Deterred by historically high spreads produced by the Oct. 19 stock market crash, most issuers of high-yield securities have shelved their public offerings until rates ease.

"I would think that new-issue volume in the first quarter of 1988 will be restrained because of uncertainty in the stock market," said John A. Frabotta, a vice president in the high-yield bond group at Merrill Lynch Capital Markets, Boston.

New issue volume in 1988 could fall 20% or 30% from the $50 billion volume expected in 1987, he said.

But the high-yield market is fundamentally healthy, said an official in the Beverly Hills, Calif., office of Drexel Burnham Lambert Inc.

"We've heard talk about weak markets," said the official, who did not want to be identified. "But from what we've seen there's always been a steady stream of buyers. There was a day or two when there was some anxiety, but there was never heavy dumping of bonds."

*Mariel C. Clemensen*

Investors, spooked by the specter of recession, embarked on a flight to quality that boosted spreads of high-yield debt.

The Drexel Burnham Lambert composite high-yield spread over the 7% Treasuries of 1994 stood at 556 basis points at the end of October compared to 411 basis points at the end of September.

The spread of high-yield debt to the Merrill Lynch Government Index stood at 373 basis points Oct. 19, 483 basis points Oct. 20 and 499 basis points Oct. 21.

The market's lack of direction also had a chilling effect on investors and issuers, analysts said.

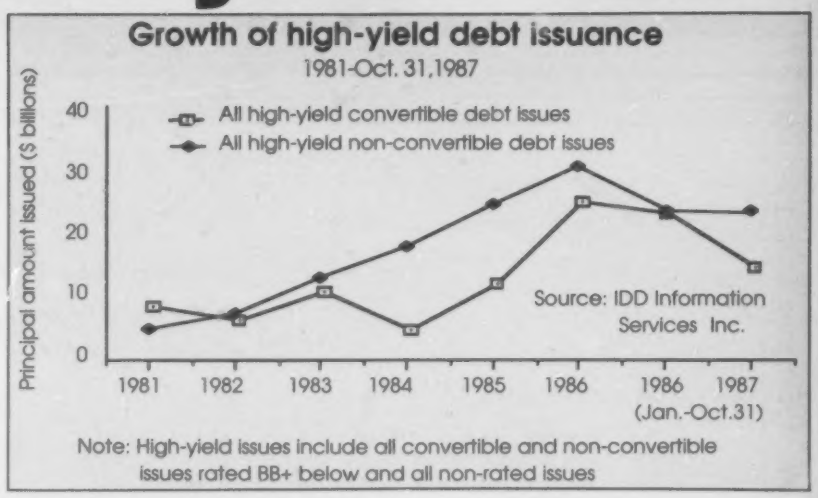
"There's no one view pulling (the market) in any particular way," said Mariel C. Clemensen, director of corporate bond research at Donaldson, Lufkin & Jenrette Securities Corp., New York. "There's basically uncertainty. Anytime you have this much uncertainty, you have inactivity."

Some issuers have sought funding in the private market while the public new-issue high-yield market has been shut down, market participants said.

But in the public markets after Black Monday, the only high-yield new issue was offered by SCI Television Inc., Nashville, Tenn. The company issued $400 million of high-yield debt Oct. 21, just two days after the stock market crash widened high-yield spreads to their highest point in history.

SCI Television is owned by the Gilett Corp., Nashville, and Storer Communications Inc., Miami. Storer is a wholly owned subsidiary of SCI Holdings Inc.; both Storer and SCI Holdings were organized by the New York investment firm of Kohlberg Kravis Roberts & Co. for the ac-

*Continued on page 74*




Note: High-yield issues include all convertible and non-convertible issues rated BB+ below and all non-rated issues

## Institutional investors still bullish

By Marcia Parker

NEW YORK — Institutional investors, who were exhibiting increased interest in the high-yield market before the stock market crash last month, haven't given up on high-yield bonds even though new public market issues have dried up.

"Small investors have pulled out. That cleans those dollars out of the market . . . and that leaves the long-term players," said a senior high-yield bond trader on Wall Street who wished to remain anonymous.

"Institutional investors aren't running from the market. They are shaken, but what will rekindle their confidence is a stable rising stock market."

Right now, institutional investors are in a flight to quality. They are reviewing their high-yield portfolios, selling the low-quality bonds and keeping the high-quality ones. They're also scouting for the best values available in the market. Some investors and money managers have moved out of the high-yield market temporarily and boosted their cash and Treasury holdings. But they indicated they would return to high-yield bonds when the market stabilized.

Before the Oct. 19 market collapse, interest among institutional investors had been picking up significantly. New players, including foreign investors, a new crop of private and public pension funds, insurance companies, thrifts, foundations and endowments were making their first investments in junk bonds or increasing what had been small initial commitments.

Several Wall Street investment bankers and money managers said they were mak-

*Continued on page 73*

# *Ratings agencies eye securitization*

By Marcia Parker

NEW YORK — The major rating agencies are studying more closely the effect on the financial services industry of the growing use of securitized lending as a financing tool.

As more and more financial services firms feel the competitive pressure to securitize at least a portion of their assets, the magnitude of the market has spurred a stepped-up assessment of the risks and implications for the individual issuer's credit health as well as the industry's.

Executives at Moody's Investors Service and Standard & Poor's Corp., the two major rating agencies, said they have been concerned about the effects of securitization on the financial services industry since its advent and have taken those concerns into consideration when they rate the issuers.

But they acknowledge the increased attention can be attributed both to the rapid-fire growth of securitization and heightened interest from potential issuers and underwriters of asset-backed securities, according to Christopher Baldwin, vice president and associate director-structured transactions.

In fact, many issuers and underwriters interviewed by *Pensions & Investment Age* complained they had been getting conflicting signals and views from the agencies.

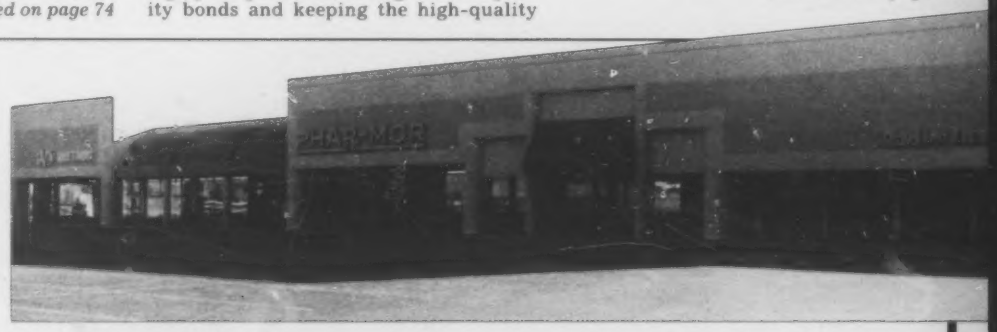
"A number of potential issuers have received contradictory information on how they would be treated if they were an issuer," said Joseph Donovan, vice president, First Boston Corp.

"I think it has kept some of the issuers out of the market. The rating agencies' analysis has a significant impact on the business."

These players have been pressing the rating agencies for more guidance, mainly about how they view the impact of securitization on the general credit quality of the issuer. The agencies also decided to examine the broader impact on the financial services industry as a whole.

A lengthy special report just released by Moody's goes a long way toward addressing some of the complex issues raised by securitization, issuers and underwriters agree. Clifford Griep, senior vice president at Standard & Poor's, said his agency will be publishing a similar report shortly. The Financial Accounting Standards Board also is looking at issues stemming from securitization as part of its study project on financial instruments.

*Continued on page 72*




*Phar-Mor Inc. will be able to expand through a financing agreement with Westinghouse Credit Corp. which allows Phar-Mor to delay incurring interest costs for up to two years.*

# Interest-ing delay

## Phar-Mor credit deal suspends costs

By Brad Rudin

YOUNGSTOWN, Ohio — Under a $50 million financing agreement made with Westinghouse Credit Corp., Pittsburgh, Phar-Mor Inc., the privately held operator of a chain of drug and discount stores, will be able to expand with a credit agreement that allows it to delay incurring interest costs for up to two years.

Phar-Mor will only incur interest costs as it draws down the debt facility during the two-year period. Each increment of the drawdown must be at least $5 million.

The company, which owns 52 stores in 11 states in the Midwest, East and South, is owned by management, members of management's family and outside investors.

In addition to the 10-year senior subordinated notes purchased by Westinghouse, the finance company will receive warrants for the purchase of Phar-Mor stock.

Neither the coupon on the notes nor the number of warrants was disclosed.

"For us it's a reasonable coupon on a current return basis for the transaction," said Bill Harper, vice president in charge of corporate finance at Westinghouse Credit. "Certainly, to the extent that we are willing to look to a good portion of our total return from the upside of the equity, that speaks to our confidence in the business, the management and

*Continued on page 73*

**Growth of asset backed securities**

| | Non-mortgage related securities | | Mortgage-related securities* | |
|---|---|---|---|---|
| | # of issues | Volume ($ bils.) | # of issues | Volume ($ bils.) |
| 1985 | 7 | 1.2 | 218 | 19.7 |
| 1986 | 23 | 10.3 | 397 | 57.4 |
| 1987** | 31 | 7.6 | 425 | 77.0 |
| TOTAL | 61 | 19.1 | 1,040 | 154.1 |

* Includes pass throughs, participation certificates and CMOs
** Through November 9, 1987

Source: IDD Information Services

# Securitization . . .

*Continued from page 71*

Some issuers and underwriters took issue with Moody's concerns about the risks of securitization. For instance, the report said although one of the perceived attractions of securitization is to reduce balance sheet risk by selling assets, Moody's says that is not happening in many cases. The agency said some securitized structures may be increasing risk through the retention of significant off-balance-sheet residual risks and by a shift in the issuers' asset mix to assets of lower quality.

Most issuers and underwriters said they felt the report fell short of giving them the detailed analysis they desire on how issuers will be treated.

"It does raise issues; it doesn't answer questions," said one investment banker active as issuer and underwriter.

Jay Weintraub, vice president of corporate bond research at Salomon Brothers Inc., said the report raised legitimate issues. But he said asset securitization would have to grow dramatically "before it would be something the credit agencies would really have to be concerned about. Overall, securitization is a good thing."

The use of asset securitization as a financing tool has grown dramatically in recent years. Mortgage-backed securities outstanding exceed $600 billion today, while trading volume last year was well over $2 trillion.

Issuers include commercial banks, investment banks, insurance companies, thrifts, mortgage banks, homebuilders, manufacturers, retailers and finance companies. These institutions have securitized a host of assets to secure debt, ranging from home mortgages to car loans to credit card receivables to corporate loans.

For issuers, the benefits are many, mainly better returns on capital and increased financial flexibility.

Mr. Griep said securitized assets allow direct access to financial markets. As a result, intermediary expenses may be eliminated, which lowers financing costs to borrowers. The successful growth of the $500 billion mortgage security market already has indicated the potential benefits to those issuers. They get to pass on or eliminate credit, interest rate and funding risks associated with balance sheet lending; add balance sheet liquidity, which improves asset management; and diversify credit risk.

Moody's identified six credit impact areas, which issuers and underwriters said would help them understand how the agency analyzes and rates them:

- The extent to which the default risk on the assets sold has been transferred from the originator/seller to the purchaser.
- The extent to which securitized asset sales affect the originator's ability to manage its asset/liability mismatch;
- The degree to which the originator's asset quality deteriorates as a result of securitized asset sales and concurrent reinvestment of proceeds in new assets.
- Whether the issuer has too great a reliance on a single funding vehicle, which may result in increased risk to the originator. That concern is warranted, Moody's said, because there is no certainty the market for publicly rated, asset-backed securities will continue to provide the same degree of depth as it has in the past. As a result, Moody's analysis will focus on the refinancing risk to the originator in terms of its access to the asset-backed securities market being impaired by company-related or exogenous factors.
- Servicing risk, since most securitized asset sales occur with responsibility for servicing the assets retained by the originator. The retention of servicing risk is a residual risk that involves an ongoing use of financial flexibility, the agency said. It considers servicing fees generated by the portfolio, the originator's administrative efficiencies, the ease with which servicing rights may be sold to third parties, and the credit quality of the serviced book of business.
- The degree to which the use of securitized asset sales mitigates the financial constraints that may have contributed in the past to a limit on market share growth. Moody's said it evaluates many aspects of the originator, including competitive environment, regulatory support, and credit quality of the new business the originator is seeking. ●

*This announcement is neither an offer to sell nor a solicitation of an offer to buy any of these Securities. The offer is made only by the Prospectus.*

## $92,621,770

## American Airlines 1987-A Grantor Trusts

### Equipment Note Pass Through Certificates Series 1987-A

## AmericanAirlines

*Each Pass Through Certificate offered by the Prospectus will represent a fractional undivided interest in one of the seven American Airlines 1987-A Grantor Trusts to be formed pursuant to seven separate trust agreements between American Airlines, Inc. and the Connecticut National Bank as trustee under each Trust. The trust property of the Trusts will consist of equipment notes issued on a non-recourse basis by certain owner trustees pursuant to six separate leveraged lease transactions to refinance approximately 80% of the equipment cost of six McDonnell Douglas DC-9-82 aircraft leased to American in 1986.*

*Interest paid on the Equipment Notes held in each Trust will be passed through to the Certificateholders of such Trust on January 1 and July 1 of each year, commencing January 1, 1988, at the rate per annum set forth below for such Trust until the final distribution date for such Trust set forth below. Principal paid on the Equipment Notes held in Trusts 1987-A1 through 1987-A5 will be passed through to the Certificateholders of each such Trust in a single payment on the final distribution date for such Trust set forth below, and principal paid on the Equipment Notes held in Trusts 1987-A6 and 1987-A7 will be passed through to the Certificateholders of each such Trust in scheduled amounts on January 1 and July 1 of each year, commencing July 1, 1992 and January 1, 1998, respectively, until the final distribution date for such Trust set forth below.*

| Pass Through Certificate | Principal Amount | Interest Rate | Final Distribution Date | Price to Public |
|---|---|---|---|---|
| 1987-A1 | $ 3,447,770 | 8.96% | January 1, 1988 | 100% |
| 1987-A2 | 6,523,000 | 9.13 | January 1, 1989 | 100 |
| 1987-A3 | 9,928,000 | 9.42 | January 1, 1990 | 100 |
| 1987-A4 | 7,881,000 | 9.65 | January 1, 1991 | 100 |
| 1987-A5 | 1,705,000 | 9.97 | January 1, 1992 | 100 |
| 1987-A6 | 19,949,000 | 10.52 | January 1, 1997 | 100 |
| 1987-A7 | 43,188,000 | 11.11 | January 1, 2005 | 100 |

**and Accrued Interest**

*Copies of the Prospectus may be obtained in any State from only such of the undersigned as may legally offer these Securities in compliance with the securities laws of such State.*

**MORGAN STANLEY & CO. Incorporated**

**SALOMON BROTHERS INC**

*October 5, 1987*

# Cash Management

# Cosponsored issues fill gap

By Fred Williams

Salomon Brothers Inc.'s withdrawal from the commercial paper market likely will prompt more corporate financial executives to issue cosponsored paper programs with two dealers.

"We didn't hire two dealers with the idea of having a backup, but this strengthens the idea of having two dealers. Today I suppose there also is less confidence that all the investment banking firms will be around five years from now," said A.M. Strecker, vice president and treasurer at Oklahoma Gas & Electric Co., Oklahoma City, which used Salomon Brothers and First Boston.

"It was quite a shock to us," Mr. Strecker said of the New York investment banking firm's decision. "A lot of people are upset about it. Had they been our sole dealer, we would probably have been frustrated."

Donald G. Reid, president of the Ashwell Division of the Chicago Corp., a money market and commercial paper consulting firm, agreed commercial paper clients would be using "a lot more cosponsored commercial paper programs because of the uncertainties in the market now."

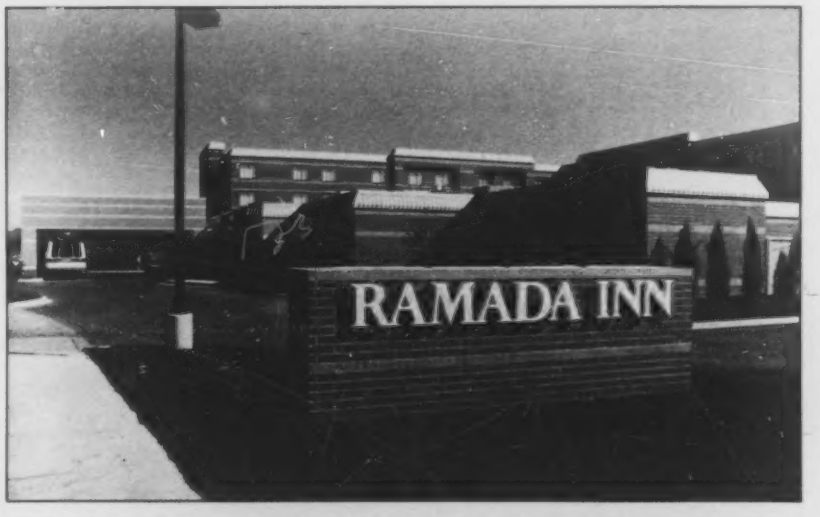
"It puts the corporate treasurer on the horns of a dilemma worrying about who will withdraw from the market . . . Right now co-managed programs are growing at a much greater rate than the single sponsored programs," said Mr. Reid.

Investment banking firms are preparing for the move toward cosponsored issues. Goldman, Sachs & Co., New York, for example, no longer will require being the exclusive dealer before it will agree to sell a client's paper.

Other corporate executives said Salomon's decision caught them off guard, leaving them uncertain about the future.

Salomon's commercial paper clients said they are putting off issues, seeking new issuers or are relying on their other dealers to take over the entire program.

Craig Sullivan, assistant treasurer at Ramada Corp., Phoenix, Ariz., said his company withdrew a proposed a $50 million unrated paper program with Salomon, which it had recently hired, when Salomon's decision was made.




*Ramada Corp. withdrew a proposed $50 million unrated commercial paper issue with Salomon Brothers after Salomon officials announced their firm plans to leave the commercial paper business by year end.*

"We had our legal and (Securities and Exchange Commission) opinions and were within a week to 10 days when they pulled out," he said. "We received no advance word.

"They told us what they were doing, and we weren't aware of their decision to phase out by December or January. That was not part of the offer. In fairness to them, they probably didn't want to take a new program to market even if it were for two months. It would not have been in their or our best interests. They are trying to unwind what they have and didn't want to start something new."

Mr. Sullivan said Salomon has offered to help Ramada connect with another paper dealer "but with unrated paper, that makes it a little tricky for us. An unrated issue takes a Salomon Brothers to put their arm around your shoulder and lead you to the market. When they put their name behind you, it means something.

"We were going to start small at the $50 million level, and take a slow approach to see how well we were accepted and compare the pricing vis a vis under our bank lines and see what the spreads were. We wanted to get our names in the market," said Mr. Sullivan.

He said Ramada will not have to start over again. "We're not quite back to square one yet, but it is more a question now of someone approaching us or us approaching them and taking us to the marketplace," he said.

"They were our sole dealer. We are now

*Continued on page 76*

## Notes

## Hospital council hires asset manager

LOS ANGELES — The Hospital Council of Southern California, a non-profit organization of more than 230 health-care facilities, has approved Alan G. Seidner Co., Pasadena, Calif., for use by its members as a short- and medium-term investment manager.

Seidner is a fixed-income asset manager and consulting firm. HCSA approved Seidner for use by member facilities to manage cash surplus accounts as well as bonds, depreciation accounts and endowment funds.

"AGS' management techniques, data analysis and ability to obtain highly competitive execution prices will allow HCSC members to achieve a higher yield than they may presently be getting without increasing risk," said Leon Starr, HCSC vice president-financial affairs. Mr. Starr called the use of an outside investment manager "preventative medicine."

"The lack of highly specialized knowledge and constant involvement required for investing in today's market can result in financial exposure as well as legal exposure. HCSC's appointment of an approved investment management and consulting firm will hopefully protect our members from such exposure," he said.

### USAA Credit rated

NEW YORK — Moody's Investors Service Inc., New York, has rated USAA Credit Corp., San Antonio, Texas, Prime-1 for commercial paper.

USAA Credit Corp. has issued commercial paper only in the United States for the past two years.

Although USAA Credit plans to extend its paper program to the Euromarket, the company will confine the total program to $500 million outstanding, according to Moody's.

The P1 rating is based on a net worth maintenance agreement between the issue and its parent, United Services Automobile Association, which guarantees the

*Continued on page 77*

**Payden & Rygel index of short maturity assets***
**(for month ended October 31)**

| | October 1987 | Quarter ended 9/30/87 | Year to date | 12 months ended 10/31/87 | Yield level monthly change* |
|---|---|---|---|---|---|
| **90-day** | | | | | |
| U.S. Treasury bill | 0.7870 | 1.4083 | 5.1552 | 6.0370 | −134 |
| Domestic C.D. | 0.7632 | 1.5457 | 5.5215 | 6.4326 | −60 |
| Eurodollar C.D. | 0.7977 | 1.5759 | 5.6242 | 6.6077 | −70 |
| **180-day** | | | | | |
| U.S. Treasury bill | 0.9549 | 1.2106 | 5.1494 | 5.9794 | −85 |
| Domestic C.D. | 0.9596 | 1.2826 | 5.1180 | 5.9259 | −73 |
| Eurodollar C.D. | 1.0011 | 1.3132 | 5.2116 | 6.0854 | −80 |
| **1-year** | | | | | |
| U.S. Treasury note | 1.6639 | 0.7415 | 4.8743 | 5.6799 | −117 |
| **2-year** | | | | | |
| U.S. Treasury note | 2.4712 | −0.0253 | 3.8440 | 4.7817 | −102 |

*Figures are unannualized total returns. Year-to-date and 12-month figures linked monthly. Ninety- and 180-day Treasury bill yield level changes on discount basis.
*Basis points.
Source: Payden & Rygel, Los Angeles

# MDU moves $42 million among five

By Barry B. Burr

BISMARCK, N.D. — MDU Resources Group Inc. reassigned some $42 million in corporate cash among five investment managers, including three running dividend capture programs, said Douglas Mahowald, manager-treasury services.

The energy company hired Paramount Capital Group Inc., New York, and Weiss Asset Management, Hartford, Conn. Paramount was assigned $10 million and Weiss, $11 million, to run in dividend capture programs.

In addition, Mr. Mahowald said MDU assigned $2 million to P.R. Burke & Co., New York, to run in a strategy that buys and simultaneously shorts common stocks in the same industry.

MDU dropped Stovall/Twenty-First Advisers Inc., New York, which had run about $5 million in a similar long-and-short common stock strategy for about a year.

Also, MDU halved the assignment to New York-based Wharton Asset Management Corp.'s dividend capture program to $3.5 million.

Mr. Mahowald said MDU has virtually all its corporate cash, now about $70 million, with outside managers. It runs about $1 million in-house in cash equivalents, he added.

He said the company made the changes to adjust its allocation to different strategies, declining to be more specific.

According to Mr. Mahowald and Geoffrey S. Bradshaw-Mack, Paramount vice president, Paramount buys industrial common stocks with dividend yields of at least 5% as part of its dividend capture strategy.

At the same time, Paramount sells deep-in-the-money call options on the individual stocks to earn a premium and hedge against declines of particular stocks. In a deep-in-the-money call, an option's exercise price is below the current market price of the particular stock.

Mr. Bradshaw-Mack said Paramount will sell the deepest-in-the-money calls allowable to still qualify dividends for the 80% corporate income tax exclusion. He said that means calls having exercise prices one or two strike prices below the current market price.

In addition, he said Paramount buys put options, primarily on the Standard & Poor's 100 stock index, to protect against overall market drops. Sometimes Paramount will buy put options on the major market index, which tracks the Dow Jones industrial average, he added.

Weiss, in its dividend capture program, buys common stocks of electric utilities and regional telephone companies while it hedges by shorting common stocks of other companies in the same industries, explained George Weiss, principal.

Burke's strategy involves buying the strongest common stocks in any particular industries, while

*Continued on page 76*

# Statistically speaking

# Industrials top 3rd quarter stocks

By Trudy Ring

Basic industry stocks performed best in the third quarter, with a 10.1% price gain while the Standard & Poor's 500 stock index gained 5.8%, according to DeMarche Associates.

In the bond market, financial issues had the best return even though their prices declined 1.4%. The market, as measured by the DeMarche Pension Fund Bond Index of 6,000 issues, was down 2.5%.

Basic industry stocks' performance in the quarter boosted them to first place for the nine- and 12-month periods ended Sept. 30, with gains of 44.1% and 52.9% respectively. The S&P 500 was up 32.9% for the first three quarters of 1987 and 38.7% for the year ended Sept. 30.

The stock performance figures exclude dividends, while the bond figures are total return.

The basic industry sector includes companies in the automotive, building material, chemical, electrical equipment, metal and transportation industries.

The technology sector had the second best return for the quarter, 6.2%. For the first three quarters, it was up 40%; for the year, 46%. The sector consists of companies in the aerospace, drug, electronics and office equipment industries.

The consumer spending sector ranked third in the quarter, slightly underperforming the market at 5.6%. For the year-to-date and 12-month periods, it gained 36.2% and 43.2% respectively. This sector includes the household goods, food and beverage, tobacco, media, textile and retail industries.

Stocks sensitive to interest rates gained 4.7% in the quarter. For the nine- and 12-month periods, this sector was up 9.5% and 12% respectively. The sector includes banks, savings and loans, insurance companies and large gas, electric and telephone utilities.

Energy stocks had the worst performance of the quarter, declining 1.4%. For the first three quarters, the sector gained 34.9%; for the year ended Sept. 30, 40.6%. Domestic and international oil companies and oil service and equipment companies are in this sector.

The quarter's 10 best-performing industries were miscelianeous metals and minerals, up 39.7%; tobacco, up 27.6%; aluminum and copper, up 21.2%; general machinery, up 21.1%; steel, up 19.8%; electronics, up 16.5%; telephone, up 13.3%; electrical equipment, up 12.9%; consumer non-durables and building materials, both up 12%.

The 10 worst-performing industries were textiles, down 8.9%; banks, down 4.5%; electric utilities, down 3.4%; domestic oil, down 2.1%; international oil, down 1.3%; air transportation, down 1.1%; retail, up 0.1%; lodging and restaurants and food packaging and processing, both up 0.6%; and office equipment, up 1%.

The 10 best-performing individual stocks were **Newmont Mining Corp.**, up 108.9%; **FMC Corp.**, up 58.6%; **Tracor Inc.**, up 58%; **CNW Corp.**, up 57.5%; **First Mississippi Corp.**, up 56.4%; **Reynolds Metals Co.**, up 55.8%; **G. Heileman Brewing Co.**, up 52.6%; **USG Corp.**, up 48.9%; **Phelps Dodge Corp.**, up 47.7%; and **Singer Co.**, up 47%. Seven of the 10 are in the basic industry sector; the exceptions are Heileman and Singer, both consumer spending, and Tracor, technology.

DeMarche also analyzes the stock market by issues' quality, growth and yield, dividing stocks into four groups for each characteristic. As ranked by quality, below-average stocks performed best in the quarter, rising 9.2%. As rated by growth, stocks with moderate, stable growth did best, gaining 6.8%. As ranked by yield, stocks in the two lower yield quartiles performed best, rising 9% in price.

The bond market had its second consecutive negative quarter, after 11 straight quarters of positive returns. For the year ended Sept. 30, the DeMarche bond index gained 2.1%; for the past nine months, it decreased 2.3%.

Financial issues, the best performers in the quarter, also ranked first for the nine-month period, when they were down 0.4%, and the year, when they gained 3.6%.

Yankee and foreign issues ranked second in the quarter, down 1.7%. They declined 0.7% for the first three quarters of 1987 and gained 3.5% for the year ended Sept. 30.

Industrial bond issues declined 2.1% in the quarter and 1.2% in the nine months. They returned 3.1% for the year. U.S. government bonds were down 2.6% in the quarter and 2.5% in the nine months, while gaining 1.2% for the year.

Utility bonds declined 3.5% in the quarter and 3.9% in the nine months; they gained 1.4% for the year. Canadian issues were down 4.4% in the quarter and 5% for the nine months, while gaining 0.1% for the year.

Telephone bonds ranked last in all periods, declining 4.6% for the quarter, 6.5% for the nine months and 0.8% for the year.

As ranked by quality, issues rated BAA and lower had the best relative return for the quarter, declining 1.8%. As ranked by maturity, bonds with maturities of one to five years did best, gaining 0.1%. As ranked by quality and maturity combined, BAA rated bonds with maturities of one to five years did best, gaining 0.5%.

As categorized by coupon rates, bonds with low coupons — in the 0 to 2.9% range — had the best total return, 1.5%.

# GIC rates up sharply in September

By Fred Williams

Rates on insurance company guaranteed investment contracts moved substantially higher during the third quarter, with double-digit yields available on some five-year contracts.

GIC rates jumped as much as 60 basis points in September causing the yield curve to steepen on some longer-term contracts.

"The yield curve took some interesting shifts" in the third quarter, said Peter Bowles, principal with the GIC management firm of Fiduciary Capital Management Inc., Woodbury, Conn. "Rates were 65 to 85 basis points higher at the end of the quarter than at the beginning for various contracts depending on maturities."

For example, he said, the spread between a three- and a five-year simple-interest contract increased to 135 basis points at the end of September from 88 basis points at the beginning of the quarter.

The spread between three- and five-year medium-term contracts remained essentially flat. For five- and seven-year contracts, the yield spread increased to 30 points in September from 19 basis points at the beginning of the quarter.

"All this says is that the yield curve became more steep during the quarter and you got paid more for going longer," said Mr. Bowles.

Most brokers and managers said recent stock market volatility, including the 508-point drop Oct. 19, has created volatility in the fixed-income areas as well.

Mr. Bowles said violent swings in the stock market have created "more volatility than I have ever seen in the GIC market." He cited one insurance carrier that dropped its quoted rates 130 basis points one day and then increased the rate 50 basis points the next.

"There have also been a lot of placements that were scheduled which are being postponed because of the volatility in rates," he said.

David Rubin, senior director at the Beverly Hills, Calif., investment banking firm of Chambers, Dunhill, Rubin & Co., said he has seen substantial sums of money flowing to GICs by corporations trying to lock in the higher rates.

During September, he said, spreads by GICs over Treasury bills of similar maturities became "weaker and weaker; September was just awful." Spreads on a three-year contract were about 55 to 75 basis points over Treasuries, he said.

David Perry, president of Certus Financial Corp., a GIC management firm in San Francisco, said while spreads have narrowed, nominal yields on GICs are near two-year highs.

"If you subscribe to the theory that when spreads are high GICs are undervalued, you wouldn't be buying contracts now," he said. "But if you look at the nominal yields, which are higher than they have been in two years, GICs merit a lot of consideration . . . Spreads are important but it is not necessarily the only consideration."

John Knight, president of Lamberson Knight GIC Inc., Short Hills, N.J., said the narrowing spreads are partially because of insurers reaching their capacities. Third-quarter GIC activity was "fairly boring," he said.

Mr. Knight said following the 508-point decline in the market Oct. 19, about 90% of insurance companies were not even bothering to quote GIC rates, with short-term interest rates fluctuating as much as 200 basis points in one day.

He said the companies were waiting for market conditions and interest rates to stabilize because, with yields being driven down, "the companies had no place to go to cover themselves" on the investment side.

Lamberson Knight and GIC Inc., Beaverton, Ore., both provide rate quotations from insurance companies. Representative rates on five-year, single-deposit, simple-interest, $1 million GICs were as follows:

- Aetna Life & Casualty Co., Hartford, Conn., 9.41%, Sept. 30; and 8.19%, June 30.
- Allstate Life Insurance Cos., Northbrook, Ill., 9.71%, 8.56%.
- American United Life Insurance Co., Indianapolis, 9.34%, 8.31%.
- Bankers Life Assurance Co., Des Moines, Iowa, 9.05%, 8.22%.
- Canada Life Assurance Co., Toronto, 9.85%, 9.01%.
- CNA Insurance Co., Chicago, 9.44%, 8.79%.
- Confederation Life Insurance Co., Toronto, 9.69%, 8.95%.
- Connecticut Mutual Life Insurance Co., Hartford, 9.56%, 8.72%.
- Crown Life Insurance Co., Toronto, 9.71%, 8.77%.
- General American Life Insurance Co., St. Louis, 9.66%, 8.61%.
- Great West Life Assurance Co., Denver, 9.61%, 8.73%.
- Hartford Insurance Group, Hartford, Conn., 9.76%, 8.75%.
- Home Life Insurance Co., New York, 9.56%, 8.66%.
- John Hancock Mutual Life Insurance Co., Boston, 9.43%, 8.5%.
- Life Insurance Co. of Georgia, Atlanta, 9.4%, 8.85%.
- Life Insurance Co. of Virginia, Richmond, 9.53%, 8.72%.
- Lincoln National Life Insurance Co., Fort Wayne, Ind., 9.73%, 8.64%.
- Massachusetts Mutual Life Insurance Co., Springfield, 9.64%, 8.07%.
- Minnesota Mutual Life Insurance Co., St. Paul, 9.94%, no quote.
- Mutual Benefit Life Insurance Co., Newark, N.J., 9.7%, 8.58%.
- Mutual of New York, New York, 9.56%, 8.52%.
- New England Mutual Life Insurance Co., Boston, 9.51%, 8.3%.
- New York Life Insurance Co., New York, 9.75%, 8.9%.
- Northwestern National Life Insurance Co., Minneapolis, 9.65%, 8.85%.
- Ohio National Life Insurance Co., Cincinnati, 9.77%, 8.97%.
- Pacific Mutual Life Insurance Co., Newport Beach, Calif., 9.46%, 8.2%.
- Pan American Life Insurance Co., New Orleans, 9.74%, 8.94%.
- Penn Mutual Life Insurance Co., Philadelphia, 9.87%, 8.92%.
- Phoenix Mutual Life Insurance Co., Hartford, Conn., 9.74%, 8.76%.
- Provident Mutual Life Insurance Co., Philadelphia, 9.46%, 8.52%.
- Provident National Assurance Co., Chattanooga, Tenn., 9.57%, 8.58%.
- SAFECO Corp., Seattle, 9.6%, 9.27%.
- Southwestern Life Insurance Co., Dallas, 10.1%, 8.93%.
- State Mutual of America, Worchester, Mass., 9.6%, 8.45%.
- Union Central Life Insurance Co., Cincinnati, 9.88%, 8.81%.

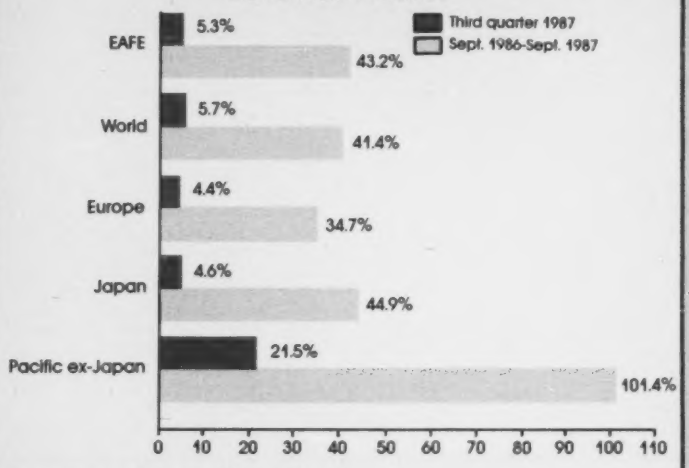
William M. Mercer-Meidinger-Hansen Asset Planning, Dallas, also surveys insurance companies for rate quotations but does not identify them by name. A summary of various bullet GICs for September is as follows:

- Three-year, $1 million, compound: high, 9.31%; low, 7.8%; average, 8.75%.
- Three-year, $1 million, simple: high, 9.35%; low, 7.77%; average, 8.73%.
- Five-year, $1 million, compound: high, 10.06%; low, 8.15%; average, 9.43%.
- Five-year, $1 million, simple: high, 10.06%; low, 8.15%; average, 9.24%.
- Seven-year, $1 million, compound: high, 10.4%, low, 8.82%; average, 9.77%.
- Seven-year, $1 million, simple: high, 10.4%; low, 8.81%; average, 9.67%.
- Three-year, $5 million, compound: high, 9.46%; low, 8.07%; average, 8.83%.
- Three-year, $5 million, simple: high, 9.41%; low, 7.86%; average, 8.78%.
- Five-year, $5 million, compound: high, 9.94%; low, 8.55%; average, 9.53%.
- Five-year, $5 million, simple: high, 9.91%; low, 8.44%; average, 9.42%.
- Seven-year, $5 million, compound: high, 10.34%; low, 7.86%; average, 9.86%.
- Seven-year, $5 million, simple: high, 10.32%; low, 8.86%; average, 9.73%.
- Three-year, $10 million, compound: high, 9.5%; low, 7.91%; average, 8.86%.
- Three-year, $10 million, simple: high, 9.45%; low, 7.89%; average, 8.81%.
- Five-year, $10 million, compound: high, 10%; low, 8.51%; average, 9.56%.
- Five-year, $10 million, simple: high, 9.85%; low, 8.46%; average, 9.43%.
- Seven-year, $10 million, compound: high, 10.45%; low, 8.87%; average, 9.86%.
- Seven-year, $10 million, simple: high, 10.34%; low, 8.88%; average, 9.73%.

# Statistically speaking

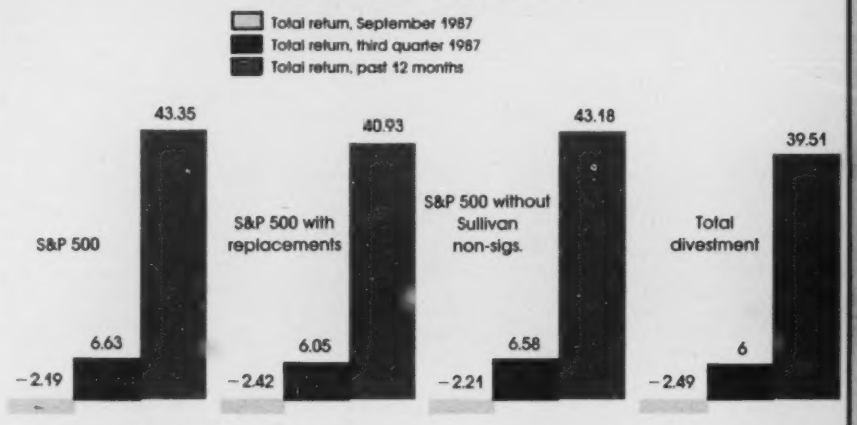
The Statistically Speaking page offers an at-a-glance look at statistics for the latest quarter.

## Morgan Stanley Capital International worldwide indexes




Source: Morgan Stanley Capital International
Indexes are in US dollar terms without dividends reinvested

## South Africa Free Index




Source: Wilshire Associates, Santa Monica, Calif.

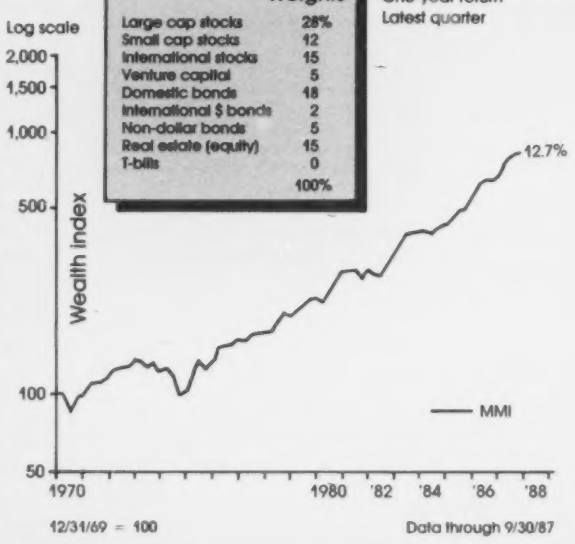
**S&P 500 with replacements:** replaces a South Africa-related company with next largest company in the industry. **S&P 500 without Sullivan non-signatories:** excludes 20 companies, no replacements. **Total divestment:** eliminates all companies with South Africa involvement, no replacements.

## Multiple Markets Index

The Multiple Markets Index is a benchmark for total portfolio returns. It is composed of eight asset classes used by retirement plan executives; it is calibrated to reflect the same degree of risk of the typical pension portfolio; it uses passive fixed policy weights; and it represents the individual asset classes by the broadest and most complete market return data available.

| Weights | |
|---|---|
| Large cap stocks | 28% |
| Small cap stocks | 12 |
| International stocks | 15 |
| Venture capital | 5 |
| Domestic bonds | 18 |
| International $ bonds | 2 |
| Non-dollar bonds | 5 |
| Real estate (equity) | 15 |
| T-bills | 0 |
| | 100% |

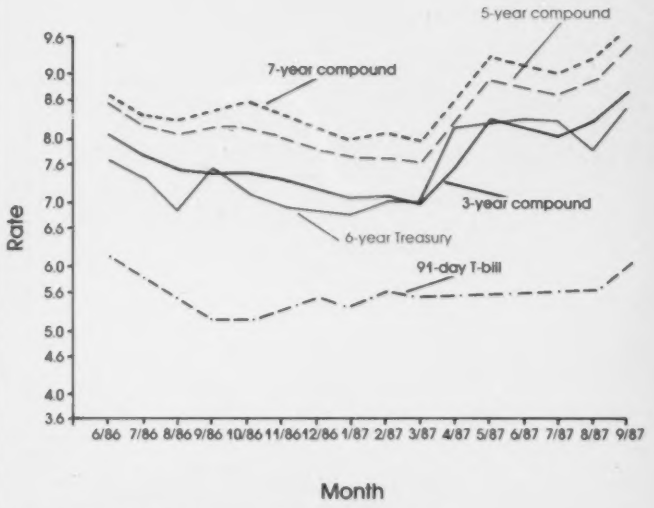
| | |
|---|---|
| Five-year annualized return | 22.2% |
| One-year return | 26.9% |
| Latest quarter | 2.9% |




12/31/69 = 100 — Data through 9/30/87

Source: First Chicago Investment Advisors, Chicago

## William M. Mercer-Meidinger-Hansen Inc. summary of average bullet GIC data vs. market yields ($ millions)




Source: William M. Mercer-Meidinger-Hansen Inc., Louisville, Ky.

## Third quarter 1987 returns

| | Russell 3000® | Russell 1000® | Russell 1000® by market capitalization | | | | Russell 2000® |
|---|---|---|---|---|---|---|---|
| | | | Large | Medium/large | Medium | Medium/small | |
| Technology | 6.7% | 7 % | 2.7% | 13.8% | 14.6% | 8.3 | 4.9% |
| Health care | 5.1 | 5.4 | 6.1 | 6 | 0.7 | 2.6 | 2.7 |
| Consumer discretionary | 4 | 4 | 8.1 | 3.8 | 2.9 | 1.5 | 4.3 |
| Consumer staples | 9.8 | 10.1 | 17.3 | 1 | 7.6 | 6.1 | 1.8 |
| Integrated oils | −0.7 | −0.7 | −0.5 | −3.8 | 1.2 | 14.6 | 8.9 |
| Other energy | 0.9 | 1.5 | — | 0.1 | 2.6 | 2.5 | −2.9 |
| Materials and processing | 11.6 | 12 | 9.9 | 9.3 | 15.7 | 12.2 | 9.3 |
| Producer durables | 12.2 | 13.5 | 15.7 | 10.3 | 18.1 | 11.5 | 3.6 |
| Auto and transportation | 5.2 | 5 | 0.8 | 10.1 | 2.9 | 4.4 | 7 |
| Financial services | 3.5 | 3.6 | 5.5 | 4.6 | 1.7 | 4.5 | 1.3 |
| Utilities | 6.1 | 6.3 | 14.5 | −0.9 | 1.2 | 0.7 | 0.8 |
| Total | 6.1 | 6.3 | 7.3 | 5.5 | 6.2 | 5.4 | 4.2 |

Source: Frank Russell Co., Tacoma, Wash.

# Earnings . . .

*Continued from page 2*

third-quarter results that lagged their performance in the same period last year.

In addition to Morgan Stanley, First Boston Inc. and Merrill Lynch & Co. produced third-quarter numbers that exceeded their performance in the third quarter of 1986.

"It was an OK quarter, but not a barn burner," Ms. McCoy said.

Morgan Stanley posted earnings per share of $2.82, an 80% increase from the $1.57 earned in the third quarter of 1986.

Officials of the brokerage firm, in a prepared statement, attributed the strong performance to a high level of activity in mergers and acquisitions, restructuring and underwriting. The firm's "equity and fixed-income sales and trading businesses performed well in the face of market conditions that were often difficult during the quarter," according to S. Parker Gilbert, chairman, and Richard B. Fisher, president.

"They really seem to be in step in all lines of their business," said Drexel's Mr. Keefe. "They are really very, very solid."

Morgan Stanley's earnings exceeded the estimate of First Boston's research unit, which had been expecting earnings of $2 to $2.30.

Michael W. Blumstein, the brokerage analyst at First Boston, said in a recent report that Morgan Stanley generated a record $262 million in revenue from its investment banking operation — merger and acquisitions and underwriting.

Despite Morgan Stanley's strong performance in the first three quarters, Mr. Blumstein said he is reducing his 1987 earnings estimate to $9 from $9.25: "This implies a fourth quarter of only $1.25, but we think caution is called for now."

Mr. Blumstein said a slowdown in underwriting and mergers and acquisitions activity were the source of his concern.

For Salomon, however, the future seems more troubled. Earnings per share tumbled to 18 cents from 82 cents in the third quarter of 1986 even though revenue slipped only slightly.

"Decreased revenue, combined with higher costs resulting from past expansion, in turn reduced profits," Salomon Chairman John Gutfreund said in a statement.

The firm plans to reduce annual operating costs by $150 million, partly through work force reductions, Mr. Gutfreund added.

Mr. Blumstein offered a guarded view of Salomon's restructuring plans, saying in his report "a turnaround is not just around the corner, particularly given the difficult market environment . . . for some time to come."

Although Merrill Lynch's earnings increased dramatically from the third quarter of 1986, much of the results can be attributed to a pretax gain of $122.6 million from the firm's sale of its partnership interest in the South Tower of the World Financial Center in Manhattan.

Without the sale, earnings would have stood at 86 cents rather than the $1.72 reported, said Stephen J. Schwartz, the brokerage analyst at Shearson Lehman Brothers Inc.

Merrill Lynch reported earnings of 86 cents for third quarter 1986. ■

# SEC issues rule

WASHINGTON — Investment advisers must disclose to clients disciplinary action and financial problems, according to a Securities and Exchange Commission rule that codifies prior court rulings and administrative decisions on the subject.

The rule, which was introduced more than a year ago and adopted with modifications recently, requires investment advisers to disclose actions taken against them within the past 10 years by courts, government agencies and self-regulating entities such as the New York Stock Exchange.

The rule will take effect 60 days after publication in the Federal Register, which likely means an effective date in December, said Thomas S. Harman, who heads the SEC's Office of Disclosure and Adviser Regulation.

It also requires investment advisers to disclose financial conditions that could reasonably prevent them from fulfilling their obligations to clients.

These disclosures, part of Rule 206(4)-4 under the Investment Advisers Act of 1940, can be made orally or in writing, Mr. Harman said. If the disclosures are made orally, the investment adviser bears the burden of establishing the communication was made.

The SEC proposed the rule to emphasize the disclosure requirement found in case law, he said, explaining codification of court precedent gives the disclosure requirement greater visibility. "We don't think that the rule establishes a new point of law."

Non-compliance with the requirement has been a concern to SEC regional offices around the country, Mr. Harman said.

In its cost benefit analysis of the rule, the SEC said enforcement costs "could decrease because codifying the standard should increase compliance."

The SEC can secure compliance with the rule by filing civil suits or criminal complaints. Conviction on a criminal charge of nondisclosure carries a maximum fine of $10,000 and a prison term of not more than five years, Mr. Harman said. ■

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# 100 eyed for proxy action

By Marcia Parker

A handful of major institutional investors led by the $31.5 billion New York State Common Retirement Fund are sponsoring shareholder resolutions for the 1988 proxy season, calling on more than 100 companies to withdraw from South Africa.

Meanwhile, New York State Comptroller Edward V. Regan, who is responsible for the New York State fund, who has waged the biggest South Africa shareholder resolution campaign, criticized the divestment drive that other funds have pursued. He accused them of sustaining significant losses at the expense of pensioners and taxpayers by selling stock in portfolio companies, and questioned whether they are carrying out their fiduciary responsibilities under the law.

"The selling of shares from a large portfolio is costly. The New Jersey state pension fund divested of $3.4 billion of assets at a cost of $26.1 million in transaction costs and $25 million annually in lost investment opportunities," he said.

"Such a churning of the portfolio is not conducive to strong returns on investment. What legislature would approve these expenditures if they were included in a state budget as line items?"

(Roland M. Machold, director of the New Jersey Division of Investment, said the $25 million in opportunity cost was en early estimate; he believes the true cost is "considerably in excess" of that figure.)

Mr. Regan also charged there is little evidence that selling stock has any impact on South Africa's policy of apartheid.

"Since there must be a willing buyer, there is no inducement for the corporation to leave

*Continued on page 61*

*Edward Regan is critical of the divestiture policies followed by some U.S. pension funds.*

Pensions & Investment Age

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The newspaper of corporate and institutional investing • $4.00 an issue • $80 a year • November 30, 1987

# Dump stocks, funds told

By Chuck Paustian

Executives of Wall Street investment banking firms are going over the heads of corporate pension executives, urging chief executives and chief financial officers to sell stocks from the pension portfolios.

Those efforts apparently fueled decisions by such companies such as Rockwell International Corp., Pittsburgh, and Primark Corp., Detroit, to, reportedly, sell all stocks held by their pension funds.

Although officials of neither company would return phone calls, one Rockwell money manager, who asked not to be identified, said the company has instructed its equity managers to sell all the stocks in their portfolios. *Pensions & Investment Age* estimates Rockwell had about $7.1 billion in pension assets as of Sept. 30.

Some observers also speculated investment banking firms were behind Seattle-based Boeing Co.'s move to reduce the equity exposure of its $5 billion pension fund. But Gary Bland, vice president-trust investments and investor relations, denied the assertions, saying the move was not induced by an outside firm, but was part of a normal review.

Mr. Bland added the move was not related to Financial Accounting Standards Board Statement 87, which he called a short-term consideration.

Other pension executives agreed that investment strategies related to FASB 87 change the focus to short-term considerations of plan sponsors from long-term interests of plan participants.

"There's no doubt the leading proponents of (FASB 87 strategies) live on Wall Street," said Keith P. Ambachtsheer, president of Keith P. Ambachtsheer & Associates, a pension consulting firm in Toronto. Such strategies emphasize the present value of accumulated benefits rather than the on-going liabilities of the fund, he said.

"The accountants have given Wall Street an entry to make hay of that anomaly," he added.

Still, Wall Street strategists are taking their arguments directly to top executives because they tend to be more sensitive than pension executives to matters concerning reported earnings.

Persuading corporate executives to sell stocks and invest in less volatile bond-based strategies would generate significant business for the investment banking firms doing the persuading.

Industry sources said executives of firms such as Salomon Brothers Inc., Goldman, Sachs & Co., The First Boston Corp. and Morgan Stanley & Co. Inc., all of New York, are warning of the potential impact of fluctuating pension asset values on reported earnings because of FASB Statement 87.

The Wall Street strategists also use the opportunity to demonstrate how various strategies, such as immunized bond portfolios, can smooth the pension volatility

*Continued on page 61*

# Managers didn't sell on 'Black Monday'

**Pension fund money managers weren't selling on Black Monday, a survey of 48 of the 100 largest managers of tax-exempt assets shows.**

**And since that calamitous day, more than 60% of the money managers report they have been net buyers to varying degrees, while only about 17% say they have been net sellers.**

**While news accounts have reported that neither foreign investors nor individuals were selling into the Oct. 19 crash, pension fund managers now can be added to the list.**

**In an anonymous poll, *Pensions & Investment Age* found only three of 48 managers surveyed — including one major vendor of portfolio insurance — sold into the crash, while seven said they did some buying on that day.**

**While many sat on the sidelines for the first day or two following the crash, others took advantage of sharply lower equity prices. One manager, with a 25% cash position**

*Continued on page 66*

# Inside:

PROPERTY: The "best and brightest" pension fund real estate executives, American developers moving into Asia, another JMB deal for investors and more real estate financing and investing news are found in *P&I Age*'s supplement — Pages P1-P21.

CORPORATE FINANCE: After six years of slimming down and restructuring, Ogden Corp. has emerged as a major diversified services company that some analysts contend is a winner destined for big rewards — Page 55.

PUBLIC FUNDS: International investing is hot among the nati $6 billi alre

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# Markets, critics foil British Coal

By Joel Chernoff and Holly Smith

Critical investor reaction and falling markets foiled plans by British Coal Corp.'s pension fund to sell shares in Pan-American Properties Inc., its $508 million New York real estate investment trust.

The initial public offering, withdrawn following the Oct. 19 stock market crash, was sharply criticized by some investors and analysts. Some complained the yield was too low for a REIT without a record of public management; some mentioned problems with the management arrangements; and others said the preliminary prospectus failed to make adequate disclosure on some of the properties in the trust.

David Prosser, chief executive of CIN Management Ltd., which manages the London-based British Coal fund, said, "I can't see us going public (with the REIT) in the next six months. There has been a very sharp change of confidence in the equity market. It's like an eggshell that's been stepped on. It will take time to put together again."

The sale was designed to

*Continued on page 65*

*British Coal's Pan-American Properties Inc. REIT owns this San Francisco building.*

# Insurers reach GIC limits

By Fred Williams

Several insurers already have reached their 1987 capacity in GICs, and some could withdraw entirely from the market in 1988.

Although many insurance companies commonly reach their limits for taking in guaranteed investment contract money by late December, the crunch hit by October this year, thanks to interest rate jitters, narrowing spreads over competing investments and the growing inflow of cash from 401(k) plans.

Capacity problems are expected to worsen next year. Even more money is expected to flow into GICs, yet industry sources predict about a half dozen insurers will drop out of the market because it's not profitable enough.

State insurance commissions establish maximum reserve requirements for insurance companies in the GIC business. If the returns on GICs are more than the contribution rates, the companies must set aside excess reserves over the amount they take in from GIC investors. This causes strain on the insurance company in the year the GIC is written.

GIC brokers and analysts say the larger mutual benefit life insurance companies have been operating on a narrower capital and surplus basis because they can be taxed on these reserves.

Industry sources say the insurance companies at or approaching capacity for 1987 include Allstate Life Insurance Cos., Northbrook Ill.; General American Life Insurance Co., St. Louis; Sun Life (U.S.), Wellesley, Mass.; The New England Co., Boston; Northwestern National Life Insurance Co., Minneapolis; and Mutual Benefit Life Insurance Co., Newark.

GIC brokers are quick to point out, however, that insurance companies that have effectively priced themselves out of the market would dive back in if interest rates were to drop noticeably.

Some expect carriers that provide window contracts, which accept cash for a specified period of time at a rate locked in at the beginning of the period and are most often used in 401(k) plans, will be hardest hit.

Window contracts are exposed to interest rate changes for a longer time than bullet contracts, and cash flow varies by month and in accordance with other market activities, said Michael Kristopik, assistant vice president at Frank B. Hall Consulting Co., Detroit.

"In my estimation we won't lose players, but we will lose some of the window players because of the variability of cash flow," he said.

Most insurers are having trouble finding safe harbors for the GIC money being placed with them. (Insurance companies make their money by reinvesting GIC assets at a premium. Usually, they attempt to match the investments by maturity or duration to protect themselves.)

Said Rob Schaefer, vice president of the Blue Bell, Pa., GIC broker Dietrich & Associates: "There is a lot of uncertainty. The story we are getting is insurance companies are having problems finding good investment-grade investments on the other side. Yes, we see some getting out next year . . . some of the marginal players may find the risk of being in does not justify the investment," said Mr. Schaefer.

"Insurance companies have been able to generate assets, but they are concerned about the liquidity of the assets they are purchasing on the other side," said David Rubin, principal with Chambers, Dunhill, Rubin & Co., an investment banking firm in Beverly Hills, Calif.

"They are finding it very difficult to make money in this market. The competition is strong, and spreads are very poor. Many of the larger carriers have already reached their capacity and are not doing any new business this year.

"The big companies will remain if just for market presence in order to continue serving their client base."

As an alternative to insurance company GICs, Mr. Rubin's firm has placed $40 million in bank guaranteed fixed-income contract, a strategy other firms — including Certus Financial Corp., San Francisco — are considering.

"We are creating a different market with different players, not insurance companies, with organizations like banks. Bank guaranteed instruments can be priced more competitively and will come with FDIC insurance as an added benefit," Mr. Rubin said.

"We think the emergence of banks and bank investment contracts will increase, rather than decrease, the number of companies (primarily large commercial banks) providing products," said David Perry, president of Certus.

"We agree there will be some insurance company pullback and they will begin picking their spots a little more carefully," he said.

Strong cash flow from the the growing 401(k) market has exacerbated the capacity problem for insurers.

Insurance companies reached their capacity earlier than usual because 65% to 70% of 401(k) plan assets have been allocated to GICs, said Gene Gochenour, president of GIC Inc., Beaverton, Ore.

He agrees several insurers will leave the business next year. "The market has become too competitive for them, and spreads got too close (GICs are usually compared against Treasury instruments of the same maturity). People were used to spreads of up to 150 basis points and then spreads got down to 30-80 basis points."

Mr. Gochenour said most major insurance companies now are quoting rates well below the top rate on a five-year, $1 million bullet contract, which was 9.41% for GICs and 8.3% on a five-year Treasury bill as of Nov. 20. Jumbo insurers were quoting rates in the 8.35%-8.9% range.

Mr. Gochenour said GICs also could become more popular as a result of Financial Accounting Standards Board requirements that pension gains and losses be reflected on corporate financial statements.

"The bust in the equity market puts many plans closer to their funding requirements after being overfunded before the drop in the equity market. No one wants to show that on their statements, and, as a result . . . defined benefit plans will move more assets into GICs," Mr. Gochenour said.

"If that happens, then we will be facing a major capacity problem next year."

*Continued on page 64*

*A trust fund to pay benefits in the event of a shutdown at this and other steel plants is opposed by the Reagan Administration, which has compromised on the industry's unfunded pension liabilities.*

# Reagan balks on steel trust

By Nicky Robertshaw

WASHINGTON — The Reagan administration has compromised on the handling of the steel industry's $5.3 billion in unfunded liabilities, but still opposes a trust fund to pay benefits stemming from plant shutdowns.

The administration has accepted the concept of a special transition rule in new minimum funding standards that would allow the steel industry five years to adapt to the new standards. But the administration still is not willing to accept the trust fund concept.

This leaves the administration squared off against industry representatives, unions and some legislators on how the pension liabilities should be handled.

At a Senate Labor subcommittee hearing Nov. 20, Sens. John Heinz, R-Pa., and Howard Metzenbaum, D-Ohio, along with other lawmakers and broad labor and industry support, introduced legislation to set up a special trust backed by steel assets — and ultimately the federal government — to pay the shutdown benefits.

Those shutdown benefits account for about $3 billion, which is about half of the unfunded liability for the six largest steel companies, according to a congressional source.

The overall pension bill is still in play as part of the budget reconciliation process. Congress begins work this week on a reconciliation package to replace the Gramm-Rudman-Hollings Deficit Reduction Act automatic spending cuts that kicked in Nov. 20.

Sources familiar with the process believe the four pension reform bills approved by labor and tax-writing committees of both houses will be merged into a single bill by Dec. 16, when a continuing resolution to fund the federal government at fiscal 1987 levels runs out.

Under a special transition rule

*Continued on page 62*

# Fee increases won't fly

By Brad Rudin

The end of the bull market will make it difficult for investment managers to raise their fees, pension executives and consultants believe, though the decline in the market value of assets cut fee income substantially.

Money managers felt little pressure to increase fees last year because the bull market rewarded them with more assets, according to an SEI Corp. report that details the small upward move in the level of fees between 1985 and 1986.

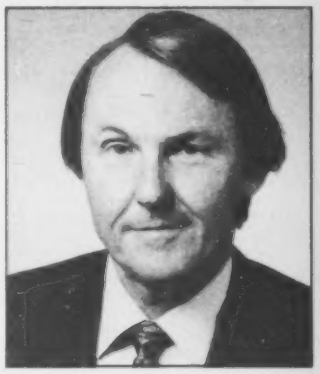
Because of the bull market, "investment firms have been able to increase revenue without adding accounts or raising fees," the SEI report said.

But now that the bull market is over, industry participants say, fees will be held down by plan sponsors' reluctance to pay more for less results.

Money managers will have less leverage on fees as the bear market continues. Equity managers, in particular, could find themselves increasingly vulnerable to a downward pressure on fees if pension funds flee the stock market for alternative investments.

Scrutiny of management fees has roots that go well beyond the October stock market plunge, said Robert E. Shultz, vice president of pension asset management at RJR Nabisco Inc., Atlanta.

Pension executives are taking a hard look at the relationship between management fees and value added by active management, said Mr. Shultz, who is the newly elected president of the National Investment Sponsor Federation, an organization of pension plan sponsors. "If somebody is charging 50 basis points and adding 50 basis points, you have not achieved an active management gain."



*Robert Shultz of RJR Nabisco says pension executives are scrutinizing managers' fees.*

"I would be very hesitant to pay any increase now," said Edwin J. Ehrlich, director of pension fund

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Vol. 13, No. 25 — Pensions & Investment Age (ISSN 0273-5466) is published bi-weekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1987.

# Cash Management

# NCCMA format phased in

By Fred Williams

ATLANTA — Only a few cash management banks soon will offer corporations the option of receiving their monthly account analysis statements in the standard format approved by the National Corporate Cash Management Association, the outgoing chairman of the NCCMA standards committee predicts.

Ware Grove, assistant treasurer and director of banking and finance at Manville Corp., Denver, said now that the standard account analysis form has been approved and released for use, many banks might look to phasing in the standard. He said some banks might accept portions of the standard form initially and implement the remainder over time.

Of the few, Chemical Bank, New York, already has announced it has adopted the NCCMA standard account analysis format and will begin offering it to corporate clients immediately.

The standard will provide a uniform format for presenting account analysis statements — an itemized, usually monthly, listing of cash management services and charges banks issue to clients. Banks now offer most of the information in their own formats.

Corporations with multibank relationships can receive dozens of account statements in differing formats. NCCMA officials view the standard account analysis as a more efficient and cost effective method of presenting cash management information to clients.

*Chuck Rawlins said the NCCMA is beginning to market the new account analysis format.*

In addition to the monthly data, the NCCMA standard also includes 12-month historical data on major balances, average float, earnings credit rate, earnings allowance and net adjustments.

A *Pensions & Investment Age* survey found only 11 banks that plan to introduce the standard this year if it became available; 31 in 1988; and 44 in 1989 or later (*P&I Age*, Aug. 10).

Mr. Grove, who turned over the chairmanship of the standards committee to Chuck Rawlins, assistant treasurer at Georgia Power Co., Atlanta, at the NCCMA conference in Atlanta, said the introduction of the standard will be evolutionary.

"As banks review their account analysis forms, as they normally do every two to three years, they may introduce all or parts of the standard," he said.

The NCCMA committee, which has representatives from 26 cash management banks, has spent three years developing the account analysis format. Some of the banks represented that are expecting to introducing the standard next year are Continental Illinois National Bank & Trust Co. and Northern Trust Co., both of Chicago, and Bankers Trust Co., New York.

Chemical Bank wasn't among the 26 sponsoring banks that developed the standard.

Andrea Frey, assistant vice president at Chemical Bank, said the bank's clients had been asking for the standard format, and "we wanted to be regarded as the leader in the industry while providing our customers with what they had been asking for."

The service initially will be offered to Chemical's corporate clients that now use the ChemLink system, a package of cash management services available through Chemical.

Ken Montgomery, senior vice president at Chemical, said the system has been tested with six or seven of Chemical's clients and "all have expressed an interest in continuing with the service. Our goal is to sign up all (1,000–1,500) of our corporate customers who pay by compensating balances," he said.

The data also will be provided in electronic form to Phoenix-Hecht, Northfield, Ill., and Treasury Strategies Inc., Chicago, for clients using the two cash management consultants and treasury software vendors.

Executives at Phoenix-Hecht announced Chemical will begin transmitting the analysis statements of Electronic Data Systems Corp., Dallas, for interpretation in the firm's proprietary account analysis system.

Gary D. Schneider, senior consultant for Phoenix-Hecht, said the electronic transmission of the EDS account information will be the first application of NCCMA standardized account information delivered to a corporate client from the bank through the Phoenix-Hecht system.

"Several vendors have claimed this capability," Mr. Schneider added, "but to my knowledge, this is the first actual application."

The ChemLink account analysis module enables corporate clients to receive account analysis statements on the 10th business day of each month.

*Continued on page 15*

# Margins stay tight

By Barry B. Burr

Issuers and dealers expect selling margins to remain tight on commercial paper, despite the abrupt withdrawal of Salomon Brothers Inc. and PaineWebber Inc., both of New York, from the market.

The withdrawals came as some money center banks — such as Morgan Guaranty Trust Co. — are increasing their presence as domestic commercial paper dealers.

The moves underscore both the lure and the danger of commercial paper for dealers trying to use the market to build more lucrative investment banking relationships with clients, the principal motive many companies cite for being in the business.

"It's a very competitive business," said George Jahelka, assistant treasurer, Pacific Lighting Corp., Los Angeles.

"The margins are very thin," added Marilyn R. Cooper, vice president-financial sales, Chrysler Financial Corp., Troy, Mich., a direct issuer of domestic paper that raises short-term funds for Chrysler Corp., Detroit.

Pacific Lighting used PaineWebber International, London, as one of its three dealers for its Eurocommercial paper program, which has $140 million outstanding and was started in March 1986.

He said Pacific Lighting doesn't plan to add a dealer to replace PaineWebber. Instead, it will rely more extensively on its existing dealers, S.G. Warburg & Co. Ltd. and Swiss Bank Corp. (International) Ltd., both of London. Swiss Bank was brought on two months ago to increase the program's distribution, he added.

"The commercial paper market is a very important market for us," Mr. Jahelka said.

"At this point, the dropping out of PaineWebber and Salomon doesn't affect us. But it's in the corporate interest for the commercial paper market to remain strong. It's a very viable way for meeting working capital needs. It's a very efficient market. I'm speaking of the domestic market; the European market has some growing up to do."

Pacific Lighting relies on commercial paper for all its short-term borrowing, he noted. It has a domestic program with as much as $600 million outstanding, which uses Merrill Lynch Money Markets Inc. and Shearson Lehman Commercial Paper Inc., both of New York, as dealers.

Despite its widespread use of commercial paper dealers, Mr. Jahelka said Pacific Lighting has its investment banking relationship with Morgan Stanley & Co., New York.

Dealers confirm the business is competitive.

"You've had two responses to the fact that it's a competitive

*Continued on page 14*

**Scudder, Stevens & Clark corporate cash matrix**

| | Yield | | | | | | Total return | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Oct. 30 | | 3 mos. ago | | 1 yr. ago | | Latest 3 mos. | | Latest 12 mos. | |
| **30-day** | | | | | | | | | | |
| Prime commercial paper/CD/BA* | 7.07 | 4.24 | 6.45 | 3.87 | 5.89 | 3.07 | 1.73 | 1.04 | 6.70 | 3.91 |
| Prime tax-exempt commercial paper | 9.17 | 5.50 | 7.00 | 4.20 | 6.11 | 3.30 | 1.97 | 1.18 | 7.47 | 4.40 |
| **49-day** | | | | | | | | | | |
| Auction-rate preferred stock (AAA-AA-A composite) | 8.60 | 5.16 | 7.30 | 4.38 | 6.93 | 3.74 | 2.08 | 1.25 | 7.79 | 4.59 |
| **90-day** | | | | | | | | | | |
| Treasury bill | 5.30 | 3.23 | 6.14 | 3.68 | 5.25 | 2.83 | 1.82 | 1.09 | 6.29 | 3.68 |
| Prime commercial paper/CD/BA* | 7.15 | 4.29 | 7.17 | 4.30 | 5.65 | 3.05 | 1.65 | 0.99 | 6.36 | 3.72 |
| Prime tax-exempt commercial paper | 10.25 | 6.15 | 7.50 | 4.50 | 7.28 | 3.92 | 1.47 | 0.88 | 6.73 | 3.97 |
| **1-year** | | | | | | | | | | |
| Treasury bill | 6.69 | 4.01 | 6.74 | 4.04 | 5.72 | 3.09 | 1.81 | 0.96 | 6.13 | 3.01 |
| Prime municipal note | 10.42 | 6.25 | 7.58 | 4.55 | 8.09 | 4.37 | 0.32 | 0.21 | 3.84 | 2.26 |

None of the instruments listed in this table are capital assets for tax purposes.
No capital gains taxation applies; all price changes are taxed at ordinary income rates.
* CD is certificate of deposit; BA is banker's acceptance

pretax
after-tax

*Ryder System will make some cash management changes in 1988, including possibly reducing the number of banking relationships.*

## Ryder taps Citibank to do study

MIAMI — Ryder System Inc. retained Citibank, New York, to undertake a corporate cash management study, said Robert Prokay, assistant treasurer.

"I would expect there will be some changes in 1988, more along the line of reducing the number of (banking) relationships," he said.

The study, by Citibank's treasury consulting group, involves the company's collection and disbursement as well as other banking cash management services, he added.

He said Ryder executives might consolidate more services with more of its 28 lines of credit banks to have a more substantial relationship with them.

"We haven't completed our work," he said, adding the changes should be completed by mid 1988.

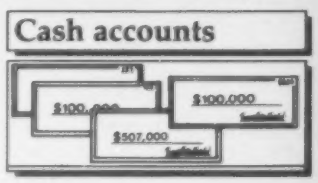
## RTE consolidates

BROOKFIELD, Wis. — RTE Corp. is consolidating its collection banks with two lockbox networks, said John Kita, cash manager.

The move will reduce its lockbox banks from four.

"We're in the process of doing it now," he said.

The electrical equipment manufacturer is opening a lockbox in Dallas with First National Bank of Chicago's collection network, while dropping its site with First RepublicBank Dallas. RTE will retain an existing lockbox in Chicago with First Chicago.




It will drop its lockbox in Pittsburgh with Mellon Bank, moving the collections to Chicago and to an existing site in Charlotte, N.C., with First Wachovia Corporate Services Inc. The company will retain an existing lockbox in Atlanta with First Wachovia.

Mr. Kita said the elimination of Pittsburgh will result in some undisclosed saving while not materially affecting float. "The company doesn't have a significant amount of business in the Northeast," he noted.

"The move in Dallas didn't reduce costs," he said. It was done to consolidate more business with First Chicago.

**PIPER**

*The statistical data are extracted from Pensions & Investments' Performance Evaluation Report, a quarterly performance evaluation published by* Pensions & Investment Age. *PIPER details comparative performance data on special equity, real estate and international funds at more than 50 banks and insurance companies. PIPER is compiled by Rogers, Casey & Barksdale Inc., Stamford, Conn.*

# Overseas funds suffer in crash

**By Marlene Givant**

The very markets that allowed the top international managers in Pensions & Investments' Performance Evaluation Report to shine turned on them during October, but most managers are sticking with their long-term strategies.

All top performers in PIPER for periods ended Sept. 30 were nearly fully invested going into the crash.

"Had there not been such pressure to keep up with the (Morgan Stanley Capital International Europe Australia Far East index), managers would have been more in cash instead of keeping low levels of liquidity regardless of value because of a desire to outperform" the index, said Ian Henderson, director of Wardley Investment Services International Ltd., London. "This may impact the way people look at performance measurement. I think it should. It's a lesson one needed after a period of such strong markets."

Wardley's $80 million International Equity fund managed for Marine Midland Bank, New York, ranked third for the year and second for the three years ended Sept. 30.

Among other top performers for periods ended Sept. 30, the $50 million International Stock Portfolio of Wellington Trust Co., Boston, was top for the quarter, returning 14.5% followed by the International Equity fund of Bankers Trust Investment Management Ltd., London, with 13.8% and Wellington's Pacific Basin Portfolio $3 million with 12.1%. The EAFE returned 5.7% for the period.

For the year, Bankers Trust was first with a 62.4% return, followed by Wellington Pacific with 60.1% and Wardley at 59%. The EAFE index returned 45.5%.

For the three years, London-based BA Investment Management International Ltd.'s International Employee Benefit Equity fund far exceeded the pack with a compound annualized 64.3% return, followed by the EAFE's annualized 57.5%, Wardley's 57% and San Francisco-based Wells Fargo Investment Advisors' passive International Equity fund, with 55.7%.

For the five years, Bankers Trust was No. 1 with a 42.6% return, while the $1 billion International Collective Equity fund of IDS International Inc., London, tied EAFE for second place with 42.4%. BA was third with 42.1%.

For the 10 years ended Sept. 30, none of the funds surpassed the EAFE's compound annualized 24.8% return. The top PIPER fund for the period was First Chicago Investment Advisors' International Equity fund with 22.6% and London-based J.P. Morgan Investment Inc.'s International Equity fund with 21.9%.

But the crash of October took some of the gleam off those returns.

During the week of the crash, Bankers Trust's $130 million fund took profits in small European and Far East markets and Japan, where it had invested 32% in mainly domestic sectors. It then bought Japanese export companies, which were severely depressed from the declining dollar, boosting Japanese exposure to 40% as a short-term play.

Bankers Trust also was heavily exposed to liquid, hard-currency European markets, but it also overweighted Australia and Canada, which were battered severely in October.

Indeed, noted Lynn Minard, director of global marketing, "some of the same reasons that gave us outperformance in the second and third quarter gave us a (beating) in October."

Similarly, three other top performers were hurt in October by their overweightings in Spain.

While BA, which runs a $47 million fund, thinks there is only a 30% chance of a U.S. recession, it is buying defensive stocks and sticking to hard-hit Spain with a whopping 25% exposure, the same allocation it has in the United Kingdom. It believes those markets would have enough domestic growth to withstand a recession.

Wellington Trust's hefty 10% in Spain, which makes up 1% of the EAFE, accounted for much of the success of its international fund.

"Spain was Europe's top market in the third quarter. It was up 30.5% because of record corporate profits and our Spanish portfolio outperformed that of the market," said Jerrold Mitchell, senior vice president.

Wardley Investment also had a significant commitment to Iberia. Portugal was particularly buoyant in the third quarter because of favorable economic news, deregulation and falling interest rates, said Mr. Henderson.

BA, whose assets declined roughly 25% in October, now has less than 5% in Japan, the largest stock market, and has little in other Far East markets because they could be hurt by a downturn in spending by U.S. consumers.

It owns defensive food companies in Europe such as **Unilever N.V.**, in the Netherlands, and is buying stocks that would benefit from a reduction in interest rates such as **Pleasurama PLC,** a U.K. domestic tourist services company.

In Japan, Wellington Trust has a good representation in blue-chip, export stocks, which were strong performers during the

*Continued on page 22*

# Speed benefits special equity pool

**By Anne E. Schwimmer**

Using a strategy of quick buys and sells, the $15 million select equity fund of the First RepublicBank, Dallas, ranked first for the year ended Sept. 30 with a return of 74.5%, more than 20 percentage points higher than the next best performer among commingled special equity funds in Pensions & Investments' Performance Evaluation Report.

California First Bank, San Diego, also did well; its supplemental equity fund ranking second with a return of 53.1% for the year. It was followed by the Putnam Cos.' Putnam specialty growth trust with 52.6%, First Alabama Bank of Mobile's special stock common trust fund, 52.5%, and New York-based Morgan Guaranty Trust Co.'s supplemental opportunity fund, 52.4%.

By comparison, the PIPER special equity median return was 34.7% for the year, and the Standard & Poor's 500 stock index returned 43.5% for that period.

But most of the funds reported declines about equal to that suffered by the market in October.

"Our stocks came down, but we maintained our relative position vs. our competitors," said Matthew Weatherbie, Putnam managing director and chief investment officer-specialty growth equities. The Putnam fund now has assets of $41 million, reflecting a loss of $11 million during the crash. The Putnam Cos. Inc. is a subsidiary of Marsh & McLennan Cos. Inc., New York.

First RepublicBank's fund, however, was heavily in cash Black Monday and escaped relatively unscathed, said Ben J. Fischer, senior vice president of First Republic. He said the indicators were pointing to upcoming difficulties in the market.

In addition to its 12-month returns, the non-diversified equity fund also did well in the longer term, returning a compound annualized 42.3% to rank third for the three-year period.

Mr. Fischer said stocks are bought based only on their low price-earnings ratio and sold instantly once they go up. The small group of stocks in the fund — never more than 10 at a time — tend to have a high turnover rate. Because of this, there was no single outstanding stock in the fund, Mr. Fischer said, but he cited **Consolidated Rail Corp., Old Republic International Corp., American Bankers Insurance Group Inc.** and **Ashton-Tate Corp.** as doing well.

The top performing special equity funds had varied methods behind their successes.

The Putnam fund, which in addition to its high 12-month return ranked 11th in the quarter with 8.9%, focused 60% of its $52 million portfolio in small-capitalization companies, choosing them on a detailed analysis of their expected growth, said Mr. Weatherbie. The rest of the portfolio was placed in larger-cap companies that were expected to show improved relative earnings growth and profitability, he said.

In the small-cap portion, exceptional leaders included **American Cablesystems,** a cable TV company; **Charming Shoppes Inc.,** a specialty retailer; **Community Psychiatric Centers,** which owns and operates psychiatric facilities; **Manpower Inc.** and **Kelly Services Inc.**; and **Digital Communications Associates Inc., Stratus Computer Inc., Sun Microsystems Inc.** and **Telerate Systems Inc.,** all technical and computer-related stocks.

Mr. Weatherbie said the stocks were chosen for their leadership in their fields, strong management, growth history, strong financial positions and superior return on equity.

Among the larger-capitalized holdings, drugs stocks such as **Merck & Co. Inc., Schering-Plough Corp.,** and **Warner-Lambert Co.** did well, as did technical stocks such as **Digital Equipment Corp., Apple Computer Inc**. and **Tandem Computers Inc**. He also pointed to special-situation stocks, such as paper and chemical companies and consumer non-durable goods, such as **Philip Morris Cos. Inc.**

First Alabama's $10 million special stock common trust fund also was among those performing well in the three- as well as the 12-month period, placing eighth with a 10.1% return for the quarter.

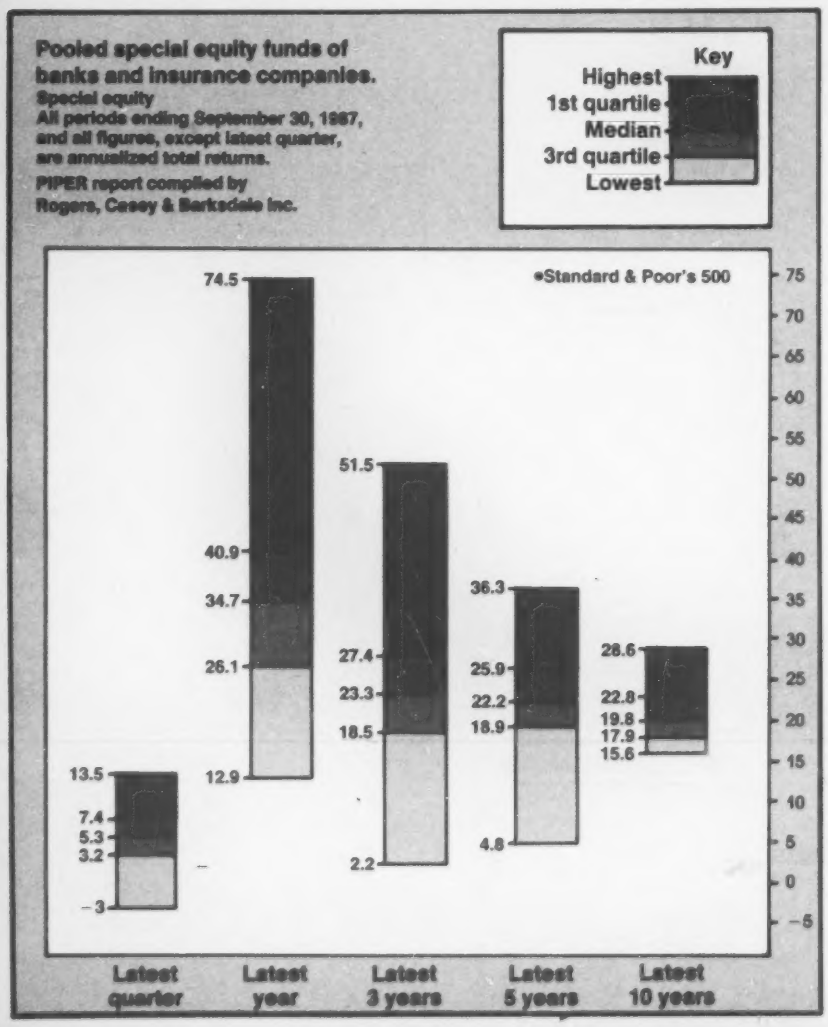
The fund, which holds roughly 20 stocks, was invested in mostly technical and basic industry stocks for the year ended Sept. 30, said Charles Murray, trust investment officer.

Good performers were **Motorola Inc., Hewlett-Packard Co., E.I. du Pont de Nemours & Co., International Paper Co., Weyerhaeuser Co., Eastman Kodak Co.** and **Thomas & Betts Corp.**, Mr. Murray said.

First Alabama Bank of Mobile's fund now stands at $7 million; it lost $3 million in the crash.

For longer time periods, California First is a recurring name, placing second in the

*Continued on page 23*

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# Real estate funds hit hard

## Steep declines in value slash returns of certain pools by 50%

By Steve Hemmerick

Pension officers, now suffering from a stock plunge, saw many of their real estate returns cut by as much as 50% in one 12-month period, Pensions & Investments' Performance Evaluation Report shows.

Some of the biggest declines — coming primarily in value rather than income yield — hit some of the largest and most well-respected commingled real estate funds. Those included some closed-end funds of Coldwell Banker Capital Management Services, Los Angeles, and The RREEF Funds, San Francisco, and open-end funds of First Chicago Investment Advisors, Chicago, and First Wachovia, Winston-Salem, N.C.

For the 12 months ended June 30, the total return for Coldwell Banker Institutional Fund V fell to 3.6% from 14.7% in the 12 months ended June 30, 1986; Coldwell Banker Institutional Fund II fell to 2.4% from 7.3%; Coldwell Banker Institutional Fund VI fell to 1.5% from 6.8%; and Coldwell Banker Institutional Fund VII fell to −3.9% from 10.1%.

Brought down by the midyear writedown on properties, The RREEF Funds USA II fell to −14.7% from 3.3%; RREEF Mid America I, to −7.9% from 7%; RREEF USA I, to 1% from 10.8%; and RREEF Mid America II, to 5.6% from 14.1%.

The fund with the lowest return for the one-year period was the First RepublicBank Real Estate Equity Fund, which had a −23.8% return, vs. 9% for the earlier period.

A longtime consistent performer, First of Chicago's Real Estate Fund F, fell to 3.6% from 9.7%. Also, First Wachovia's Real Estate Fund fell to 6.3% from 13.4%.

For the same 12-month period ended June 30, the S&P 500 returned 25.2%, the Shearson Lehman Government/Corporate bond index returned 4.7%, and the Consumer Price Index, 3.8%.

The top-performing open-end fund was Chase Manhattan Real Estate Fund, New York, which had a 16.6% return, up from 15.2% the previous 12 months. The top performing closed-end fund was the $390 million JMB Institutional Group Trust 1 at 21.6%, the highest return of all funds and above its 18.6% returns of the previous 12 months.

A key reason behind Chicago-based JMB's performance was its roughly 60% weighting in retail properties. Retail properties, particularly large shopping malls, have been showing large gains in appreciation.

Benefiting from the increasing retail values also was the Tower fund of Metropolitan Life Insurance Co. Real Estate Investments, New York. The fund scored a 13.6% return, more than eight percentage points above the 5.2% return it scored the previous 12 months.

The Tower Fund was one of the few to show a large gain. Part of the return came from appreciation in the Rhode Island Mall in Warwick, R.I. It was purchased for about $20 million and, after rehabilitation, now is valued at $42 million, said Bruce Kosakowski, national director for Metropolitan's real estate funds.

The Tower Fund has about $168 million in assets, and its property mix is 25% retail, 35% office, 11% research and development and 29% industrial.

Another reason for the sharp increase, said Mr. Kosakowski is that Metropolitan recognized most of its losses by the end of the first quarter of 1986 and it now has no depreciation "undercutting our returns."

The fund, he said, had just more than 6% income and just more than 7% appreciation.

Previous recognition of losses in depreciation also helped the return for Metropolitan's Separate Account RE, which rose to 8.9% from 6.6%.

The $240 million fund didn't increase as much as the Tower fund partly because it has a much smaller retail component, about 8% of assets, said Mr. Kosakowski. For Separate Account RE, the income return was about 7.2% and appreciation was 1.7%.

In some funds with sharp losses, the declines were attributed to drops in appreciation or flat appreciation; what return was available came strictly from income. But real estate executives pointed out the losses are on paper only because the properties were not sold and, barring a recession, they hope the market has bottomed out and values will begin to rise.

Other losses were attributed to a combination of lower income and drops in value. Part of the reason for the lower return of the First Chicago Real Estate Fund F was vacancies; about one-third of the leases of its properties turned over in some of the softest real estate markets, said J. William Baker, a vice president with First Chicago.

Consequently, he said, vacancies in surrounding properties not owned by the $656 million Fund F caused leasing agents for the fund's properties to reduce some rents. As with other property advisers, he said, First Chicago officials reduced rents by offering free rent up front to get tenants to sign long-term leases. However, he said, since First Chicago, unlike some other real estate funds, doesn't count income until it is in hand, the fund registered no income from some properties during the performance period.

That brought down the income return somewhat, he said. For the latest period, the income return for the fund was 5.9% and appreciation was −2.3%.

For the $400 million First Wachovia fund, all but 0.5% of the return was from income, said Robert Smedley, senior vice president. The fund, he said, "tracked pretty well what was happening in the industry" and that, he said, was the "squeezing out of appreciation that took place during mid-1986, 1987."

There has been "significant bumps on the appreciation side," said Mr. Smedley, and in some instances "initial lease-up took longer than in past years."

For a 10-year period, the Wachovia fund had a 15% return, second only among open-end funds to the Morgan Guaranty Real Estate Fund managed by J.P. Morgan Investment Management Inc., New York, which had an 18.4% return. ■


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## Top quartile commingled special equity funds

### 3-month returns

| | % |
|---|---|
| Morgan Guaranty (Supp.), N.Y. | 13.5 |
| First of Minneapolis (20), Minn. | 11.8 |
| First Trust Co. Minn. | 11.1 |
| First of Maryland | 11.1 |
| Manufacturers Hanover, N.Y. | 10.8 |
| LaSalle Nat'l (Small cap.), Ill. | 10.6 |
| Chemical Bank (Value), N.Y. | 10.4 |
| First Alabama, Mobile | 10.1 |
| Associated Bank (Worldwide), Wis. | 9.4 |
| EF Hutton Trust (5), Del. | 9.0 |
| Marsh & McLennan (Putnam) | 8.9 |
| Provident Nat'l, Pa. | 8.3 |
| Connecticut Nat'l Bank (Supp.) | 8.0 |
| Manufacturers Hanover (Uncom.) | 7.9 |
| General American (II), Mo. | 7.9 |
| Prudential (MIDCO), N.J. | 7.8 |
| EF Hutton Trust (Growth B), Del. | 7.8 |
| Wachovia Bank (Div. cap.), N.C. | 7.8 |
| Metropolitan Life (SA 43), N.Y. | 7.7 |
| Connecticut Bank & Trust (Supp.) | 7.6 |
| Harris Trust (Spec. cap.), Ill. | 7.5 |
| Bank of America (Emp. ben.) | 7.4 |
| **Standard & Poor's 500** | **6.6** |

### 1-year returns

| | % |
|---|---|
| First RepublicBank, Texas | 74.5 |
| California First Bank (Supp.) | 53.1 |
| Marsh & McLennan (Putnam) | 52.6 |
| First Alabama, Mobile | 52.5 |
| Morgan Guaranty (Supp.), N.Y. | 52.4 |
| Citicorp (Resources), N.Y. | 52.2 |
| Irving Trust (II), N.Y. | 48.7 |
| Bank of America (Emp. ben.) | 47.9 |
| Manufacturers Hanover (Supp.) | 45.0 |
| First of Minneapolis (20), Minn. | 44.7 |
| Wachovia Bank (Div. cap.), N.C. | 44.7 |
| Chemical Bank (Value), N.Y. | 44.5 |
| Northern Trust, Ill. | 44.3 |
| First Trust Co., Minn. | 43.9 |
| **Standard & Poor's 500** | **43.5** |
| Society Nat'l (Ohio reg.), Ohio | 43.4 |
| Metropolitan Life (SA 43), N.Y. | 43.1 |
| General American (II), Mo. | 42.4 |
| Texas Commerce | 41.6 |
| Connecticut Nat'l Bank (Supp.) | 41.4 |
| Associated Bank (Worldwide) | 41.2 |
| Trust Co. of the West | 40.9 |
| Harris Trust (Spec. cap.), Ill. | 40.9 |

### 3-year returns

| | % |
|---|---|
| EF Hutton Trust (Growth B), Del. | 51.5 |
| EF Hutton Trust (Emerg. B), Del. | 48.8 |
| First RepublicBank, Texas | 42.3 |
| First of Neenah (Reg.), Wis. | 35.0 |
| Trust Co. of the West | 34.6 |
| Fidelity Mgmt. Trust (Agg.), Mass. | 34.4 |
| Chase Manhattan (Inter. cap.) | 33.1 |
| Manufacturers Hanover (Supp.) | 32.3 |
| First of Minneapolis (20), Minn. | 30.3 |
| Citicorp (Spec. sit.), N.Y. | 29.7 |
| **Standard & Poor's 500** | **29.4** |
| Bankers Trust (Supp.), N.Y. | 28.7 |
| First Trust Co., Minn. | 28.5 |
| Northern Trust, Ill. | 28.5 |
| Old Second Nat'l (HR 10), Ill. | 28.2 |
| First of Neenah (Inc.), Wis. | 27.9 |
| Citicorp (Emerg. health), N.Y. | 27.8 |
| Bank of America (Emp. ben.) | 27.8 |
| Society Nat'l (Ohio reg.), Ohio | 27.7 |
| EF Hutton Trust (5), Del. | 27.6 |

### 5-year returns

| | % |
|---|---|
| Fidelity Mgmt. Trust (Agg.), Mass. | 36.3 |
| California First Bank (Supp.) | 30.0 |
| Chase Manhattan (Inter. cap.) | 30.0 |
| Citicorp, (Spec. sit.), N.Y. | 28.7 |
| Connecticut Nat'l Bank (Supp.) | 28.2 |
| Citicorp (R.E.), N.Y. | 28.2 |
| First Trust Co., Minn. | 28.1 |
| Equitable Bank, Md. | 27.0 |
| Manufacturers Hanover (Uncom.) | 27.0 |
| **Standard & Poor's 500** | **26.8** |
| Manufacturers Hanover (Supp.) | 26.7 |
| Society Nat'l (Ohio reg.), Ohio | 26.7 |
| Provident Nat'l, Pa. | 26.5 |
| Bank of America (Emp. ben.) | 26.3 |
| First of Maryland | 26.1 |

### 10-year returns

| | % |
|---|---|
| California First Bank (Supp.) | 28.6 |
| Bankers Trust (Supp.), N.Y. | 25.7 |
| First of Maryland | 23.8 |
| Manufacturers Hanover (Supp.) | 23.4 |
| Chase Manhattan (Inter cap.) | 23.3 |
| Bank of America (Emp. ben.) | 23.2 |
| Equitable Bank, Md. | 22.9 |
| Connecticut Bank & Trust (Emp.) | 22.8 |
| Citicorp (Spec. sit.), N.Y. | 22.6 |
| **Standard & Poor's 500** | **18.3** |

## Commingled international

### 3-month returns

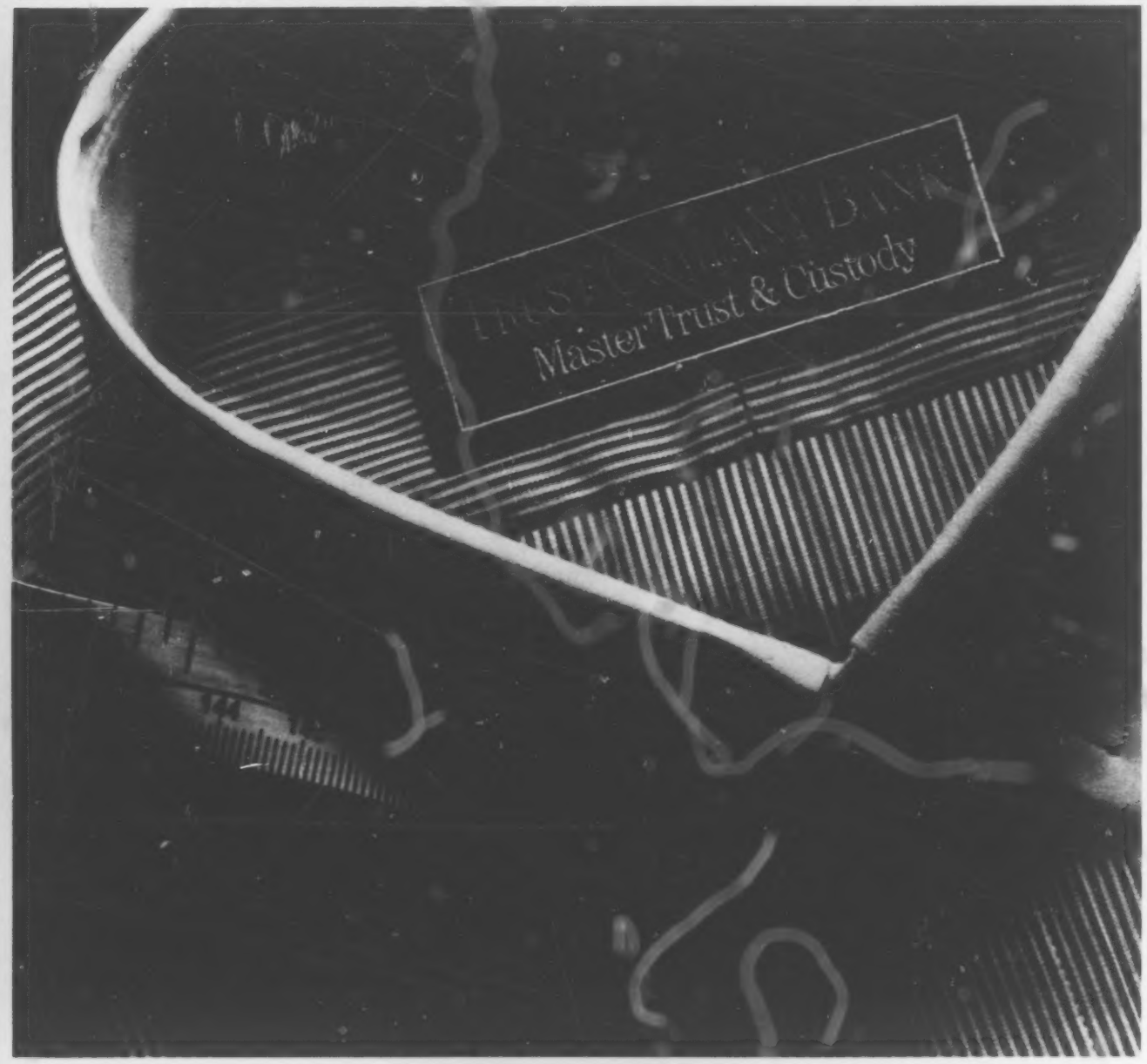
| | % |
|---|---|
| Wellington Trust (Eq.), Mass. | 14.5 |
| Bankers Trust (Eq.), N.Y. | 13.8 |
| Wellington Trust (Pacific Basin) | 12.1 |
| California First Bank (Eq.) | 11.6 |
| Marine Midland (Eq.), N.Y. | 10.3 |
| Prudential (Print eq.), N.J. | 10.1 |
| Provident Nat'l (Low p/e eq.), Pa. | 9.3 |
| IDS Trust (Coll. eq.), Minn. | 9.2 |
| Morgan Guaranty (Eq.), N.Y. | 9.2 |
| Fidelity Mgmt. (Eq.), Mass. | 9.1 |
| HT Investors (Eq.), R.I. | 9.1 |
| Bessemer Trust (E), N.Y. | 8.7 |
| Citicorp (Eq.), N.Y. | 7.5 |
| First RebublicBank (Eq.). Texas | 7.3 |
| Marsh & McLennan (Putnam) | 7.1 |
| Bank of America (Eq.), Calif. | 6.9 |
| Centerre Trust (Coll. eq.) | 6.9 |
| Aetna MIM (Eq.), Conn. | 6.7 |
| First of Chicago (Eq.), | 6.5 |
| CIGNA Corp. (Eq.), Conn. | 6.2 |
| **MSCI World Index** | **6.2** |
| Chase Investors (EAFE index) | 6.2 |
| **MSCI EAFE Index** | **5.7** |
| Harris Trust & Savings (Eq.), Ill. | 5.4 |
| Wells Fargo (Eq.), Calif. | 5.3 |
| Chase Manhattan (Global eq.) | 5.3 |
| State Street Bank (Index), Mass. | 5.1 |
| Toledo Trust (Eq.), Ohio | 3.0 |
| Wellington Trust (Bond), Mass. | −1.8 |
| Toledo Trust (Global bond), Ohio | −2.3 |
| Prudential (Global bond), N.J. | −2.5 |
| First of Chicago (Non-dlr. fixed) | −2.5 |
| Bank of America (Fixed), Calif. | −3.0 |
| Prudential (Foreign bond), N.J. | −3.9 |
| Citicorp (Fixed), N.Y. | −4.6 |
| Morgan Guaranty (Bond), N.Y. | −5.5 |

### 1-year returns

| | % |
|---|---|
| Bankers Trust (Eq.), N.Y. | 62.4 |
| Wellington Trust (Pacific Basin) | 60.1 |
| Marine Midland (Eq.), M.Y. | 59.0 |
| Fidelity Mgmt. (Overseas), Mass. | 50.4 |
| Provident Nat'l (Low p/e eq.), Pa. | 48.6 |
| Wellington Trust (Eq.), Mass. | 46.8 |
| IDS Trust (Coll. eq.), Minn. | 45.7 |
| State Street Bank (Index), Mass. | 45.6 |
| Wells Fargo (Eq.), Calif. | 45.6 |
| **MSCI EAFE Index** | **45.5** |
| Bessemer Trust (E), N.Y. | 45.0 |
| Chase Investors (EAFE index) | 44.7 |
| **MSCI World Index** | **44.4** |
| First of Chicago (Eq.) | 43.1 |
| CIGNA Corp. (Eq.) | 42.8 |
| Chase Manhattan (Global eq.) | 41.3 |
| Bank of America (Eq.), Calif. | 41.3 |
| HT Investors (Eq.), R.I. | 40.5 |
| Prudential (Print eq.), N.J. | 40.2 |
| First RepublicBank (Eq.), Texas | 38.9 |
| California First Bank (Eq.) | 37.5 |
| Morgan Guaranty (Eq.), N.Y. | 37.0 |
| Marsh & McLennan (Putnam) | 36.9 |
| Centerre Trust (Coll. eq.), Mo. | 34.2 |
| Aetna MIM (Eq.), Conn. | 33.6 |
| Citicorp (Eq.), N.Y. | 32.5 |
| First of Chicago (Non-dlr. fixed) | 19.4 |
| Toledo Trust (Eq.), Ohio | 15.4 |
| Wellington Trust (Bond), Mass. | 15.4 |
| Prudential (Foreign bond), N.J. | 14.7 |
| Bank of America (Fixed), Calif. | 14.1 |
| Citicorp (Fixed), N.Y. | 13.8 |
| Prudential (Global bond), N.J. | 13.1 |
| Toledo Trust (Global bond), Ohio | 12.3 |
| Morgan Guaranty (Bond), N.Y. | 11.9 |

### 3-year returns

| | % |
|---|---|
| Bank of America (Eq.), Calif. | 64.3 |
| **MSCI EAFE Index** | **57.5** |
| Marine Midland (Eq.), N.Y. | 57.0 |
| Wells Fargo (Eq.), Calif. | 55.7 |
| Bankers Trust (Eq.), N.Y. | 55.0 |
| Bessemer Trust (E), N.Y. | 54.1 |
| Citicorp (Eq.), N.Y. | 51.6 |
| Chase Manhattan (Eq.), N.Y. | 51.5 |
| CIGNA Corp. (Eq.), Conn. | 51.5 |
| Wellington Trust (Pacific Basin) | 51.1 |
| Wellington Trust (Eq.), Mass. | 50.6 |
| First of Chicago (Eq.) | 50.3 |
| IDS Trust (Coll. eq.), Minn. | 49.3 |
| Aetna MIM (Eq.), Conn. | 49.3 |
| Marsh & McLennan (Putnam) | 48.7 |
| Centerre Trust (Coll. eq.), Mo. | 45.4 |
| First RepublicBank (Eq.), Texas | 45.4 |
| California First Bank (Eq.) | 45.3 |
| Morgan Guaranty (Eq.), N.Y. | 45.0 |
| HT Investors (Eq.), R.I. | 42.3 |
| **MSCI World Index** | **42.2** |
| Toledo Trust (Eq.), Ohio | 34.7 |
| Prudential (Global bond), N.J. | 31.1 |
| Bank of America (Fixed), Calif. | 28.4 |
| First of Chicago (Non-dlr. fixed) | 28.3 |
| Prudential (Foreign bond), N.J. | 27.9 |
| Citicorp (Fixed), N.Y. | 27.5 |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|---|---|
| Morgan Guaranty (Bond), N.Y. | 24.0 |
| Toledo Trust (Global bond), Ohio | 22.5 |
| Wellington Trust (Bond), Mass. | 21.0 |

### 5-year returns

| | % |
|---|---|
| Bankers Trust (Eq.), N.Y. | 42.6 |
| **MSCI EAFE Index** | **42.4** |
| IDS Trust (Coll. eq.), Minn. | 42.4 |
| Bank of America (Eq.), Calif. | 42.1 |
| Wells Fargo (Eq.), Calif. | 40.6 |
| Centerre Trust (Coll. eq.), Mo. | 38.2 |
| Citicorp Trust (Coll. eq.), N.Y. | 37.7 |
| First of Chicago (Eq.) | 37.6 |
| Marsh & McLennan (Putnam) | 36.8 |
| Wellington Trust (Eq.), Mass. | 36.1 |
| Bessemer Trust (E), N.Y. | 35.4 |
| Morgan Guaranty (Eq.), N.Y. | 34.9 |
| **MSCI World Index** | **33.8** |
| HT Investors (Eq.), R.I. | 30.5 |
| Chase Manhattan (Global eq.) | 30.3 |
| First of Chicago (Non-dlr. fixed) | 19.6 |
| Bank of America (Fixed), Calif. | 17.5 |
| Morgan Guaranty (Bond), N.Y. | 17.3 |
| Citicorp (Fixed), N.Y. | 17.3 |

### 10-year returns

| | % |
|---|---|
| **MSCI EAFE Index** | **24.8** |
| First of Chicago (Eq.) | 22.6 |
| Morgan Guaranty (Eq.) | 21.9 |
| **MSCI World Index** | **21.1** |

## Real Estate closed-end funds

### Periods ended June 30

### 1-year returns

| | % |
|---|---|
| JMB Institutional (I) | 21.6 |
| Metropolitan Life (II), N.Y. | 17.8 |
| JMB Institutional (II) | 13.8 |
| John Hancock (SERA 1), Mass. | 13.4 |
| LaSalle Advisors (LFII), Ill. | 13.3 |
| Lehndorff & Babson (Prop.) | 11.5 |
| CIGNA Corp., Conn. | 11.5 |
| State Street Bank (I), Mass. | 11.1 |
| JMB Institutional (III) | 11.0 |
| RREEF (Mid Amer./East IV) | 10.7 |
| LaSalle Advisors (LSF), Ill. | 10.2 |
| RREEF (Mid America III) | 10.1 |
| Landauer Advisors (I) | 9.8 |
| Equitec (I), Calif. | 9.6 |
| Aetna Life & Casualty (CERESA I) | 9.5 |
| State Street Bank (II), Mass. | 9.4 |
| RREEF (West V) | 9.3 |
| Sarofim Trust (SIRF P-I) | 9.1 |
| RREEF (West IV) | 8.8 |
| Metropolitan Life (I), N.Y. | 8.3 |
| Aetna Life & Casualty (CERESA II) | 8.1 |
| Coldwell Banker (VIII) | 7.6 |
| Coldwell Banker (IV) | 7.0 |
| RREEF (West III) | 6.6 |
| RREEF (West VI) | 6.3 |
| State Street Bank (III), Mass. | 6.2 |
| Equitable Life (New prop.), N.Y. | 5.6 |
| RREEF (Mid America II) | 5.6 |
| RREEF (USA III) | 4.4 |
| RREEF (West II) | 4.2 |
| **Consumer Price Index** | **3.8** |
| Coldwell Banker (III) | 3.7 |
| Coldwell Banker (V) | 3.6 |
| Coldwell Banker (II) | 2.4 |
| Coldwell Banker (VI) | 1.5 |
| RREEF (USA I) | 1.0 |
| RREEF (West I) | −0.1 |
| Coldwell Banker (VII) | −3.9 |
| RREEF (Mid America I) | −7.9 |
| RREEF (USA II) | −14.6 |

### 3-year returns

| | % |
|---|---|
| JMB Institutional (I) | 19.3 |
| John Hancock (SERA 1), Mass. | 17.4 |
| State Street Bank (I), Mass. | 15.6 |
| JMB Institutional (II) | 14.6 |
| LaSalle Advisors (LSF), Ill. | 14.5 |
| Landauer Advisors (I), N.Y. | 13.3 |
| Sarofim Trust (SIRF P-I) | 13.2 |
| Coldwell Banker (V) | 13.1 |
| Aetna Life & Casualty (CERESA I) | 13.1 |
| Equitable Life (New prop.), N.Y. | 11.4 |
| CIGNA Corp., Conn. | 11.2 |
| RREEF (Mid America II) | 10.4 |
| State Street Bank (II), Mass. | 9.9 |
| RREEF (West III) | 9.6 |
| RREEF (Mid Amer./East IV) | 9.1 |
| Metropolitan Life (I), N.Y. | 9.0 |
| Coldwell Banker (IV) | 8.9 |
| RREEF (West II) | 8.5 |
| RREEF (West VI) | 8.4 |
| RREEF (West V) | 7.9 |
| Coldwell Banker (II) | 7.8 |
| RREEF (USA I) | 7.4 |
| Coldwell Banker (III) | 6.1 |
| Coldwell Banker (VII) | 5.8 |
| Coldwell Banker (VI) | 5.7 |
| RREEF (West I) | 5.3 |
| RREEF (USA III) | 4.9 |
| **Consumer Price Index** | **3.1** |
| RREEF (Mid America I) | 2.2 |
| RREEF (USA II) | −1.7 |

### 5-year returns

| | % |
|---|---|
| JMB Institutional (I) | 19.2 |
| LaSalle Advisors (LSF), Ill. | 16.0 |
| Coldwell Banker (V) | 13.0 |
| RREEF (Mid America II) | 12.5 |
| Equitable Life (New prop.), N.Y. | 11.8 |
| RREEF (West III) | 11.2 |
| Coldwell Banker (II) | 11.0 |
| Coldwell Banker (IV) | 10.5 |
| RREEF (West II) | 10.2 |
| RREEF (USA I) | 9.6 |
| RREEF (West IV) | 8.4 |
| RREEF (West I) | 8.3 |
| Coldwell Banker (VI) | 8.1 |
| Coldwell Banker (III) | 8.0 |
| RREEF (Mid America I) | 5.5 |
| RREEF (USA II) | 5.0 |
| **Consumer Price Index** | **3.2** |

1,000 largest funds: Jan. 25.

### 10-year returns

| | % |
|---|---|
| Coldwell Banker (II) | 18.5 |
| RREEF (West I) | 15.0 |
| **Consumer Price Index** | **6.5** |

## Real Estate open-end funds

### Periods ended June 30

### 1-year returns

| | % |
|---|---|
| Chase Manhattan, N.Y. | 16.6 |
| Morgan Guaranty, N.Y. | 14.3 |
| Copley (Dev. prop.), Mass. | 14.2 |
| Metropolitan Life (Tower), N.Y. | 13.6 |
| Wells Fargo Realty, Calif. | 13.2 |
| Prudential (PRISA II), N.J. | 12.0 |
| United Virginia Bank | 12.0 |
| Citicorp, N.Y. | 11.5 |
| New York Life Ins. (SA 3) | 11.4 |
| Phoenix Mutual, Conn. | 11.1 |
| NCNB Nat'l Bank, N.C. | 10.9 |
| Canada Life Assurance | 10.7 |
| Third Nat'l Nashville, Tenn. | 10.3 |
| Prudential (PRIMOR), N.J. | 9.9 |
| Prudential (MORISA), N.Y. | 9.4 |
| Massachusetts Mutual | 9.3 |
| Equitable Life (Prime prop.), N.Y. | 9.3 |
| Metropolitan Life, N.Y. | 8.9 |
| Harris Trust (Inc. prop. F), Ill. | 8.9 |
| Goldman Sachs (Inprop.), N.Y. | 8.6 |
| Bank One Trust Columbus, Ohio | 8.1 |
| Bank of Boston | 8.1 |
| Aetna Life & Casualty (RESA) | 7.4 |
| Principal Mutual Life, Iowa | 7.3 |
| Aetna Life & Casualty (PMSA) | 7.3 |
| CIGNA Corp., Conn. | 7.2 |
| Union Labor Life (J), D.C. | 7.0 |
| Sanwa Bank (F), Calif. | 6.7 |
| Travelers, Conn. | 6.4 |
| Wachovia Bank, N.C. | 6.3 |
| Sun Bank, Fla. | 6.2 |
| Prudential (PRISA), N.J. | 4.5 |
| **Consumer Price Index** | **3.8** |
| First of Chicago (F) | 3.6 |
| Southland Trust (SREEF), Texas | 3.5 |
| Mutual Benefit Life (VCA-5), N.J. | 2.5 |
| John Hancock, Mass. | −1.2 |
| SeaFirst Bank, Wash. | −4.6 |
| First RepublicBank (Eq.), Texas | −23.8 |

### 3-year returns

| | % |
|---|---|
| Copley (Dev. prop.), Mass. | 17.8 |
| Citicorp, N.Y. | 15.4 |
| Chase Manhattan, N.Y. | 15.3 |
| Morgan Guaranty, N.Y. | 15.1 |
| Phoenix Mutual, Conn. | 14.7 |
| Prudential (MORISA), N.J. | 14.6 |
| Canada Life Assurance | 14.2 |
| Prudential (PRISA II), N.J. | 14.0 |
| Union Labor Life (J), D.C. | 13.8 |
| Prudential (PRIMOR), N.J. | 13.7 |
| NCNB Nat'l Bank, N.C. | 13.1 |
| Bank One Trust Columbus, Ohio | 11.9 |
| Wells Fargo Realty, Calif. | 11.4 |
| Metropolitan Life, N.Y. | 11.4 |
| United Virginia Bank | 11.2 |
| CIGNA Corp., Conn. | 10.9 |
| Wachovia Bank, N.C. | 10.9 |
| Goldman Sachs (Inprop.), N.Y. | 10.7 |
| Harris Trust (Inc. prop. F), Ill. | 10.6 |
| Aetna Life & Casualty (PMSA) | 10.6 |
| Bank of Boston | 10.6 |
| Southland Trust (SREEF), Texas | 10.6 |
| Equitable Life (Prime prop.), N.Y. | 10.5 |
| Mutual Benefit Life (VCA-5), N.J. | 10.4 |
| Massachusetts Mutual | 9.8 |
| Metropolitan Life (Tower) | 9.7 |
| Third Nat'l Nashville, Tenn. | 9.6 |
| Sun Bank, Fla. | 8.9 |

*Continued on page 22*

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Merrill Lynch

# Overseas . . .

*Continued from page 17*

quarter.

Globally, the firm's industry breakdown is 33% each in basic industry and consumer stocks and a smaller portion in regulated services like banking and utilities and what it calls applied science industries such as pharmaceuticals and electronics.

Like BA, Wellington Trust stayed pretty much on the sidelines during the crash. In October, its assets declined about 20%.

The firm's $3 million Pacific Basin portfolio also was sharply underweighted in Japan vs. the Morgan Stanley Capital International Pacific Basin index and invested in sectors similar to those of the international fund.

Early in the third quarter, Wardley Investment reduced its U.K. exposure to 16.5%, but in September the exposure was raised to 26%.

"We remained overweight when the U.K. market proved to be one of the least resilient in the market fall of October," said Mr. Henderson.

The firm also was "wrongly overweight" in France, which suffered uncertainty over poor export performance and privatizations soaking up excess liquidity, he said.

But the firm boosted exposure to Japan, the least scarred market in October, to 44% from 35.5% during the quarter to reap gains from the market's sharp August and September rise. It repositioned the Japanese portion to include export stocks because domestic stocks had lost favor due to interest rate rises and the dollar's brief period of stability.

New Zealand exposure was tripled to 6% during the early part of the quarter but scaled back to 3% in September.

Wardley, which lost 24.5% in October, raised cash to 30% at the beginning of November, largely by liquidating some holdings in Japan and the United Kingdom on Black Monday.

"Everybody wanted to increase liquidity soon after it became clear the markets would have a severe correction," said Mr. Henderson.

Since then, it has moved significantly into continental Europe, buying such high-yield companies as **Philips N.V.** in the Netherlands and **Nokia Oy AB**, a Finnish manufacturer of telecommunications equipment and cables.

Contrary to the other top managers, Peter Lamaison, president and chief investment officer of IDS International, avoids Spain and Portugal.

He likes large, liquid markets and smaller markets that have been popular longer than Spain, such as Hong Kong, Singapore and Australia.

Unfortunately, an overweighting in those markets vs. the EAFE contributed to the firm's 20% loss for the month of October.

"We had anticipated that the world economy would almost grow too much in 1988, raising inflationary fears. The crash took those away. We were positioned to take advantage of above average earnings growth," said Mr. Lamaison.

IDS had no cash because it thought the bull market had some momentum left. Now, quality, liquid companies that have clear earnings potential and have been hurt the worst are the firm's favorites.

"Switzerland looks solid as a rock and it has more of an entrepreneurial go to it than Germany," said Mr. Lamaison.

Switzerland's **F. Hoffmann-La Roche & Co. AG,** and West Germany's **Sandoz Ltd.**, a specialty chemical and pharmaceutical company, are among Mr. Lamaison's picks.

Mr. Lamaison also likes U.K. consumer staple goods and has purchased stock in **B.A.T. Industries PLC**, a tobacco company. ■

*Continued from page 21*

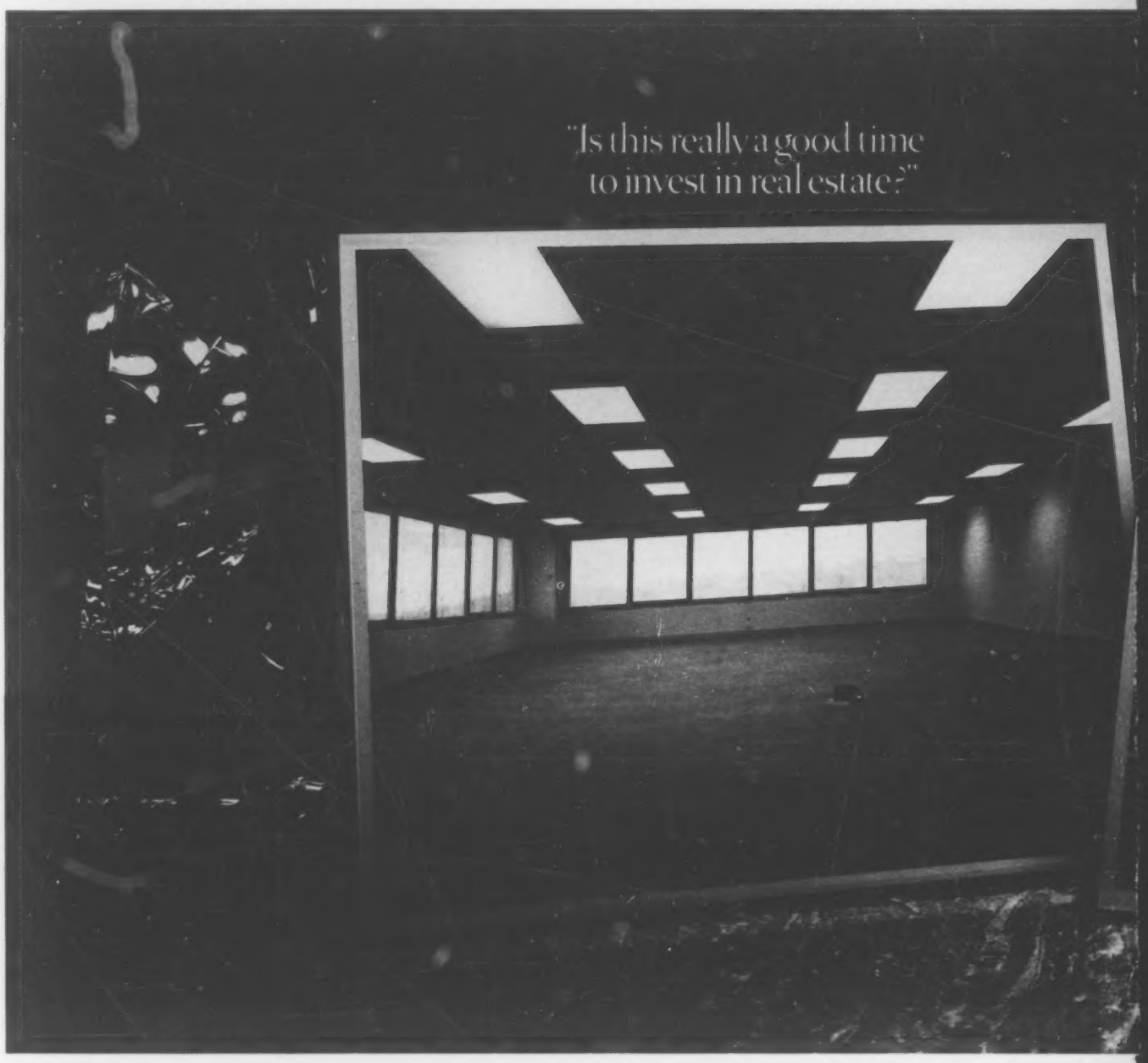
| | |
|---|---|
| Aetna Life & Casualty (RESA) | 8.7 |
| Principal Mutual Life, Iowa | 8.7 |
| First of Chicago (F) | 8.0 |
| Travelers, Conn. | 7.6 |
| Prudential (PRISA), N.J. | 7.4 |
| Sanwa Bank (F), Calif. | 7.0 |
| New York Life (SA 3) | 6.7 |
| John Hancock, Mass. | 4.5 |
| **Consumer Price Index** | **3.1** |
| SeaFirst Bank, Wa. | 2.2 |
| First RepublicBank (Eq.) | −2.4 |

### 5-year returns

| | % |
|---|---|
| Copley (Dev. prop.) | 20.7 |
| Morgan Guaranty, N.Y. | 16.5 |
| Union Labor Life (J), D.C. | 15.2 |
| NCNB Nat'l Bank, N.C. | 15.0 |
| Phoenix Mutual, Conn. | 15.0 |
| Prudential (MORISA), N.J. | 14.8 |
| Prudential (PRISA II), N.J. | 14.5 |
| Chase Manhattan, N.Y. | 14.4 |
| Prudential (PRIMOR), N.J. | 14.4 |
| Aetna Life & Casualty (PMSA) | 13.3 |
| Canada Life Assurance | 13.2 |
| Metropolitan Life, N.Y. | 13.0 |
| CIGNA Corp., Conn. | 12.8 |
| Metropolitan Life (Tower), N.Y. | 12.7 |
| Southland Trust (SREEF), Texas | 12.7 |
| Mutual Benefit Life (VCA-5), N.J. | 12.3 |
| Citicorp, N.Y. | 12.1 |
| Equitable Life (Prime prop.), N.Y. | 11.8 |
| Bank of Boston | 11.7 |
| United Virginia Bank | 11.7 |
| Bank One Trust Columbus, Ohio | 11.0 |
| Wachovia Bank, N.C. | 10.3 |
| Wells Fargo Realty, Calif. | 10.2 |
| Aetna Life & Casualty (RESA) | 10.2 |
| Massachusetts Mutual | 10.1 |
| First of Chicago (F) | 10.1 |
| Principal Mutual Life, Iowa | 10.0 |
| Sun Bank, Fla. | 10.0 |
| Third Nat'l Nashville, Tenn. | 9.7 |
| Prudential (PRISA), N.J. | 8.6 |
| Travelers, Conn. | 8.2 |
| John Hancock, Mass. | 7.2 |
| New York Life Ins. (SA 3) | 5.5 |
| SeaFirst Bank, Wash. | 5.1 |
| **Consumer Price Index** | **3.2** |
| First RepublicBank (Eq.), Texas | 2.6 |

### 10-year returns

| | % |
|---|---|
| Morgan Guaranty, N.Y. | 18.4 |
| Wachovia Bank, N.C. | 15.0 |
| NCNB Nat'l Bank, N.C. | 14.4 |
| Metropolitan Life, N.Y. | 13.8 |
| Prudential (PRISA), N.J. | 13.7 |
| Equitable Life (Prime prop.), N.Y. | 12.9 |
| Wells Fargo Realty, Calif. | 12.7 |
| Bank of Boston | 11.9 |
| First of Chicago (F) | 11.8 |
| Travelers, Conn. | 11.5 |
| John Hancock, Mass. | 10.6 |
| **Consumer Price Index** | **6.5** |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The Retail Development Fund will accept subscriptions above $500,000 and is expected to close by early 1988. Pension managers call T. Jerald Moore, Vice President,

# Special . . .

*Continued from page 17*

five-year and first in the 10-year periods with compound annualized returns of 30% and 28.6% respectively.

California First's $12.5 million supplemental equity fund invests primarily in small-cap companies, said Dave Urban, assistant vice president-funds management. The fund invests in anywhere from 30 to 70 companies at a time, said Mr. Urban. "We're looking for above-average earnings momentum," he said. "We hope the companies will either become large on their own or will be bought."

Although he declined to name current holdings, Mr. Urban said technical stocks were what championed the fund. He also said a few employment-service companies that had done well and mentioned a financial news company, **American Business Journals**, that had also done well.

Although the crash dropped the fund to $12.5 million from $17 million, Mr. Urban said he believes small-cap investments are more attractive since the crash. In the worst case, he said, small companies will continue to grow and the S&P 500 will fall to their level. In the best case, the companies will grow to the level of the S&P. "Either way you have relative performance," Mr. Urban said.

For the quarter ended Sept. 30, the supplemental opportunity fund of Morgan Guaranty Trust Co., New York, was first with a return of 13.5% vs. the PIPER median of 5.3% and the S&P 500's 6.6%.

Rounding out the top five for the quarter were First National Bank of Minneapolis' Fund 20 with 11.8%, First Trust Co.'s special equity fund, St. Paul, Minn., with 11.1%, the First National Bank of Maryland's special equity fund, Baltimore, with 11.1% and the supplemental equity fund of Manufacturer's Hanover Trust Co., New York, with 10.8%.

For the three-year period, the growth fund of E.F. Hutton Trust Co., Wilmington, Del., was first with a return of 51.5% compounded annually vs. the S&P 500's 29.4%, and the PIPER median's 23.3%. Hutton's emerging growth fund was second with a compound annual return of 48.8%, followed by First Republic with a return of 42.3%, First of Neenah, Wis., with 35% and Trust Co. of the West, Los Angeles, with 34.6%.

For the five-year period, Fidelity Management Trust Co., Boston, was first with a compound annual return of 36.3%, compared with the S&P's 26.8% and the PIPER median of 22.2%. The other leaders were: California First Bank with 30%, Chase Manhattan Bank, New York, with 30%, Citicorp, New York, with 28.7% and Connecticut National Bank, Hartford, with 28.2%. All returns are compound annualized.

For the 10 years ended Sept. 30, California First Bank was the leader with a compound annual return of 28.6% vs. the S&P's 18.3% and the PIPER median of 19.8%.

Other leaders included Bankers Trust Co., New York, with an annualized 25.7%, First of Maryland with 23.8%, Manufacturer's Hanover with 23.4% and Chase Manhattan Bank with 23.3%. ■

# Organization opposes IRS benefit plan

WASHINGTON — The ERISA Industry Committee is asking the Internal Revenue Service to withdraw its proposal that would require employers to provide benefits for leased employees.

The committee also wants the IRS to hold public hearings.

"The proposed regulations carry the concept of a 'leased employee' to an intolerable extreme, wholly inconsistent with well-accepted business practices," said ERIC Executive Director Mark J. Ugoretz.

Under a September proposal, a company could be required to provide benefits to independent contractors, professionals and even some government employees who provide substantial services to a particular plant, ERIC pointed out in a release.

The current statute doesn't precisely define a leased employee, but it is generally interpreted to mean office workers or other employees leased by a firm to do work typically done by a regular employee. The proposed regulation would define a leased employee in broad terms so that it could include consultants or other independent contractors. ■


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# Public Funds

## International is hot, realty cool

By Marlene Givant

Although stock markets crashed worldwide Oct. 19, public pension funds are moving ahead with plans to place at least $6 billion more into international investments, continuing an already robust trend.

But interest in real estate, the hot investment among public funds in the past few years, will slow, with fewer funds making initial investments and more trying to reach their target allocations.

"I don't know that this was a particularly hot year" for real estate investing among public funds, said William Ramseyer, president of Pension Realty Advisors Inc., San Francisco. "Public funds are farther behind their target real estate allocations than stocks and bonds. There will be more allocations to come. Very few public pension systems entered the marketplace in 1987; most were continuing to buy."

While more than 15 public funds made their first moves — exceeding a total of $6 billion — into international investments in 1987, and still more added to their current allocations, many still are searching for their first such managers *(see charts, pages 47 and 49)*.

"They're not even thinking about (cutting back). (The crash) is an aberration. Long term, they can weather it," said Carol Proffer, principal with William M. Mercer-Meidinger-Hansen Inc., St. Louis.

With the U.S. stock market picture made bleaker by the budget deficit, there's no reason not to invest overseas, said Wendy Howard, U.S. marketing manager of the New York office of the WM Co., a London-based consultant. "It may well be overseas investments will outperform next year," she said.

Because the number of public funds is small and the market closely knit, international activity by public funds has been epidemic.

"They tend to do things in tandem. There was a catch-up period to the corporate funds because a lot of public funds had to pass legislation before being able to go international. Now they're all going ahead at the same time," Ms. Howard said, noting there are at least 17 international and global manager searches in progress.

The $23 billion California State Teachers' Retirement System, Sacramento, a leader in real estate investments with $600 million, plans to invest $400 million with international equity and bond managers after the first quarter of 1988.

It also plans to branch into special situations investments such as leveraged buy-outs and venture capital within three to four years.

"With retooled real estate, international and special situations, we'll complete the set of programs the board set one year ago," said Larry Kurmel, chief executive officer.

The fund will invest in international bonds and equities to diversify as broadly as possible.

But the diversification benefits of international equity will be put to a test because of the crash.

"Although the markets worldwide have moved in tandem as a result of the crash and the original diversification argument said there was a low correlation (between the U.S. stock market and those in the rest of the world), I think when things settle down, we'll see the correlation. But of course as the markets globalize, the correlation will begin to increase," said Ms. Howard.

For instance, in the 10 years through 1986 there was a lower level of correlation between international markets and the U.S. market than during the past three years, when to the end of 1986, there was only a 0.12% correlation between the Morgan Stanley Capital International Europe Australia Far East index and the Standard & Poor's 500 stock index.

"We will see more of a correlation between the rest of the world and the U.S., but from a base of 0.12% there's quite a margin. That will continue to lure public funds," Ms. Howard said.

Among funds moving ahead with plans to make their initial moves into international investments, are the Teacher Retirement System of Texas and the North Dakota Teachers' Insurance & Retirement Fund.

The internally managed $17 billion Texas Teachers system, Austin, expects to start investing internationally by mid-1988.

"We've got some logistical hurdles to get past and we need final board approval, but we've been looking into it for a year and I'm optimistic we'll eventually get that worked out," said Joseph Perrone, chief investment officer.

*Continued on page 49*

### 1987 allocations
(first hires)

| Fund | Amount ($ mils.) |
|---|---|
| Arizona State Retirement System | 500 |
| Boston City Retirement System | 50 |
| California Public Employees | 4,000* |
| Dallas Police & Firemen | 20 |
| Employee Retirement System of Fort Worth | 22 |
| Florida State Board of Administration | 200 |
| Illinois State Board of Investments | 40 |
| Los Angeles County Retirement Fund | 900** |
| City of Milford, Conn. | 10 |
| Nevada Public Employees | 50 |
| New Hampshire Retirement System | 55 |
| North Dakota Public Employees | 20 |
| Orange County Employees Retirement | 50 |
| Orlando Police, Fire & General | 12 |
| Sacramento County Employees | 40 |
| State of Connecticut Trust Funds | 27 |
| Utah State Retirement System | 25 |
| **(additional hires)** | |
| District of Columbia Retirement Board | 20 |
| Hawaii Employees Retirement System | 30 |
| Illinois Municipal Retirement Fund | 165 |
| Kansas Public Employees Retirement | 20 |
| Oregon Public Employes | 10 |
| San Bernardino County Employees | 10 |

*Target allocation
**$450 million initially, $450 million to come
Source: *Pensions & Investment Age*

## Public funds survive market crash

### Cautious equity stance limits damage

By Jacqueline Dutton

Public pension funds weathered the October stock market crash well due to a cautious equity stance taken by fund managers and executives.

According to pension executives of 29 of the nation's largest state and municipal funds, the equity positions of the funds were, as a whole, below the maximum levels allowed heading into the Oct. 19 stock market crash.

In addition, most of those interviewed said their funds are maintaining a conservative equity stance at a time when other funds, investors and companies are raising their equity stakes to take advantage of reduced stock prices.

For 20 funds surveyed, equity exposures are limited by the respective state or local governments. Although the median maximum equity position allowed was 50%, the stock exposure of the median fund was only 40%.

For the nine remaining funds, equity exposure is not restricted to a specific percentage, but executives are charged with making "prudent" asset allocation decisions. Among these, the median equity stance taken was 35%.

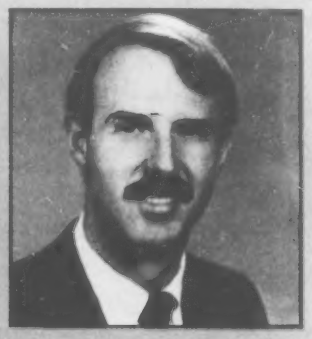
Although the Texas Municipal Retirement System, Austin, could invest up to 100% of its assets in stocks if trustees believed it to be prudent, the $1.5 billion fund came out of Black Monday unscathed. According to Gary Craig, investment officer, the fund sold all of its stocks during the spring and put everything into U.S. Treasury and corporate debt. Mr. Craig said the fund will hold its position despite the drop in stock prices.

Before the crash, the $3 billion San Francisco City and County Employees' Retirement System, the $8 billion Maryland State Retirement Systems, Baltimore, and the $3.6 billion Iowa Public Employees' Retirement System, Des

*Continued on page 48*

*David Rose of Alaska Permanent is "a little bittersweet" about selling stocks.*

*Bennett Shaver said the Maryland system was merely implementing its financial plan.*



*Maryland's Howard France, left, said the move out of stocks reduced the equity investment to 35% of total assets from 60%. San Francisco's Dewitt Bowman said fund officials have no plans to return to the equity market, but Charles Webb said the Tennessee system might "ease back in."*

## 2 smell trouble, sell stocks

By Fred Williams

While the October stock market crash caught many plan sponsors and investment specialists by surprise, at least two major public funds anticipated the market bust and sold stocks in advance to lock in market gains.

The Alaska Permanent Fund Corp. reduced passive equity exposure $725 million in the spring and shifted the assets to U.S. Treasury securities based on a belief that the market had reached its peak and was due for a correction (*P&I Age*, March 9).

Fund executives from the Maryland State Retirement and Pension Systems, Baltimore, sold $2.3 billion in stocks and established a $4 billion dedicated bond portfolio in October before the crash, feeling the market was nearing its peak (*Pensions & Investment Age*, Oct. 19).

Executives at both funds claim no special insight in calling the market, and view their conservative moves as fortuitous and in accordance with their conservative investment styles.

"It wasn't a market timing call or an asset allocation decision," said Bennett H. Shaver, secretary of the Maryland fund. "We were simply implementing our fund's financial plan."

Both funds plan to re-enter the

*Continued on page 50*

# Hot, cold . . .

*Continued from page 47*

The fund initially would commit about 1% of assets — $170 million — to foreign equities.

Wellington Management Co./ Thorndike, Doran, Paine & Lewis, Boston, the fund's investment counsel, would provide investment advice to the in-house management team.

The $315 million North Dakota Teachers' fund, Bismarck, which completed an asset allocation study with Callan Associates, San Francisco, that called for up to 5% — $15.8 million — in international investments, plans to invest overseas by next spring or summer.

"We want to study it to see if it would be politically feasible," said Scott Engmann, director. The study also called for 5% real estate, 5% cash, 35% equities and 50% bonds.

Unlike the case of international, where most 1987 activity was from first-time investors, real estate's growth was from veteran public fund investors pumping more into the area. Public funds were more active than corporate funds in real estate largely because they're further from meeting their target allocations. But funds adding to real estate plan to move slowly.

The State of Wisconsin Investment Board, which oversees about $18 billion in pension assets, will invest between $1.5 billion and $1.8 billion in real estate equity investments during the next four and a half years (*Pensions & Investment Age*, Nov. 2) and will invest a portion internationally; the approximately $36 billion New York State Common Retirement Fund will increase its equity real estate exposure to about 6% from 0.67% by 1992 primarily through direct investments (*P&I Age*, July 27); and the $43 billion California Public Employees' Retirement System and the $23 billion California teachers' system each will increase its real estate allocation to 10%.

The California Teachers fund will diversify its real estate holdings, emphasizing whole portfolio goals over individual deals to meet its target in the next three to four years.

"Historically, we've done no residential or hotel acquisitions . . . and we might consider those now. The real estate market's still tough," Mr. Kurmel said. "In the past, we and other funds looked around for good deals. There's more to it now than that. We'll make decisions based on what we want our portfolio to look like."

In addition to diversifying by property type, the fund will use different subclasses of real estate debt and equity. "We had been doing cash-on-cash deals. Now we're looking at equity kickers, equity participations and maybe some loans," he said.

"We didn't do a lot in acquisitions in '87. We just started again. The market is still a little mixed but will get healthier for long-term holders like us," said Mr. Kurmel.

The $14.5 billion Ohio Public Employees' Retirement System, Columbus, doubled its real estate investments in 1987 to $400 million, all through direct investments.

"We're trying to withdraw money from funds and go to separate accounts. . . . People don't like real estate; we like it," said Robert A. McLaughlin, investment officer. "We look at real estate on a long-term basis. In the first half of the decade, it looked overpriced, but in the last two years it's become more competitive with bonds and stocks."

Even with the October market crash, which has made stocks perhaps more attractive than real estate, the industry looks more attractive long term than bonds or cash, he said.

"The tax law changes that took place a little over a year ago really hurt the tax-paying public. The tax laws make the public funds a lot more competitive in the real estate area," Mr. McLaughlin said.

Increased real estate investments by public funds have been a function of growth in total plan assets. The greater the growth, the harder it will become to find good deals, according to consultants.

"For large public plans, the precious question is how to get all that money spent that has to be spent. With the possibility of a market decline, they might want to sell stocks and put them into other asset classes . . . The assets have to go somewhere else," said Paul Saylor, principal, Institutional Property Consultants, Atlanta.

"There's more dough allocated to real estate than can be wisely spent. It doesn't look like they can spend as much on actual real estate as they've allocated . . . The investment-grade marketplace is very capital intensive, mostly because large public funds have too much allocated to real estate. They're too bright not to spend that money sensibly. As to what's going to happen to that money, it beats me."

Mr. Ramseyer of Pension Realty Advisors is urging caution.

"We're encouraging clients to continue their disciplined approach (to real estate). They should take five years or more to meet targets, if necessary," he said. ■

## Funds with searches in progress

| Fund | Amount ($ mils.) |
|---|---|
| California State Teachers | 400 |
| Chicago Transit Authority Employees | 80 |
| Colorado Public Employees | 700 |
| District of Columbia Retirement Board | 50 |
| Fresno County Employees | NA |
| Genesee County Employees | 15 |
| Los Angeles City Employees | 200 |
| Los Angeles Fire & Police | 130 |
| Maine State Retirement System | NA |
| Maryland State Retirement System | NA |
| New York City Comptrollers Office | NA |
| Pennsylvania State Employes | NA |
| Philadelphia Municipal Pension Fund | 160 |
| Pontiac Police & Firemen | NA |
| Rhode Island Employees Retirement | 140 |
| Virginia Supplemental Retirement | NA |
| Wisconsin Investment Board | 500 |

Source: Various consultants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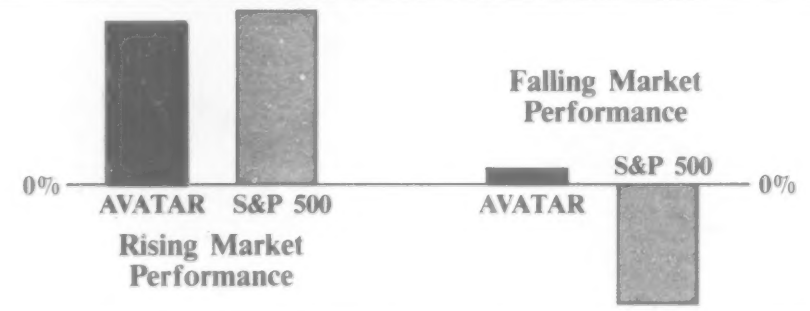


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# Corporate Finance

Photo by Dennis Kohn

*This windmill farm, constructed by U.S. Windpower Inc., is one of the many energy projects drawing the interest — and money — of insurers and their pension clients.*

## Major investors provide fuel for energy projects

**By Marcia Parker**

The builders of waste-to-energy, cogeneration and other renewable energy projects increasingly are seeking financing from a growing number of major institutional investors — including insurance companies and their pension clients — attracted by solid returns and socially and environmentally responsible investment.

"This is a large and growing market. The number of transactions are coming into Aetna at a tremendous rate. It's a growing focus for us," said Joseph E. Levy, investment director at Aetna Bond Investors, a unit of Aetna Life Insurance Co., Hartford, Conn. "These are socially and economically acceptable investments for our stockholders and our pension clients."

Dozens of garbage-to-energy plants are sprouting up across the country as communities wrestle with landfills filled to capacity and worries about protecting underground water supplies from seepage. Natural-gas and coal-fire cogeneration plants also are popping up all over, along with a sprinkling of hydroelectric plants, wood-fired generating plants, geothermal projects and windpower farms.

During the next decade, these capital-intensive projects are expected to need some $50 billion of financing, according to industry analysts. The market for refuse-to-energy facilities is especially strong, according to analysts who follow the builder-operators in the industry. Many municipalities are seeking bids from a short list of builder-operators.

Institutional investors, Wall Street investment bankers who arrange the deals and the builder-operators of these plants say there is clearly a trend toward greater use of institutional capital sources and greater use of taxable paper instead of the traditional tax-exempt paper.

Companies that financed projects partly out of internal cash flow are using those funds for other corporate purposes, and turning more to institutions with deep pockets. In addition, institutions that have had good experiences providing either debt or equity are now considering offering both.

Because the institutional financing is arranged in the private placement market, it is hard to say how much money is being pumped into these projects. But based on interviews with a variety of the key institutional players, it appears they have invested well over $1 billion in recent years.

These experts expect the bulk of the financing that will be required in the future to come from institutions, including insurance companies, finance subsidiaries of major companies and more pension funds. At least two major insurance companies say they are investing company money along with some of the pension assets they manage for outsiders.

In fact, the competition among the major institutional players is heating up, according to the institutions and Wall Street investment bankers.

"There's more competition to provide the financing. There aren't a lot of places for institutions like us to put our money," said George Schaefer, senior vice president and manager of the energy program at General Electric Credit Corp., Stamford, Conn.

Major finance companies like GECC and Ford Motor Credit Corp., Dearborn, Mich., have long played a key role in providing equity financing to these projects. Now they are stepping up their participation.

*Continued on page 57*

## Ogden hits goal in self-imposed diet

**By Marcia Parker**

NEW YORK — Six years of restructuring is starting to pay off for Ogden Corp., a company that has shed its fat to become what some analysts believe is a winner.

Ogden's transformation from a hodgepodge of capital intensive businesses to a major diversified services company is beginning to deliver its first fruits. Earnings are up, the company's balance sheet is strong, it has a $300 million-plus cash hoard on hand, debt and costs have been slashed.

Even with Wall Street's post-stock market crash economic forecasts, the company is expected to perform well, with strong future earnings prospects. Analysts who follow the company are especially keen on Ogden's growing position in the resource recovery area.

Laurence C. Baker, who follows the company for E.F. Hutton & Co., ranked Ogden as one of five stocks he believes will fare well in a slow growth environment. "They represent the highest quality in terms of balance sheet, market liquidity, cash availability and earnings stability," Mr. Baker said in his Nov. 9 report on the company.

Like most analysts who follow the company, he expects Ogden, whose stock was selling around $26 a share in early November, to see earnings rise to an estimated $1.30 per share this year, and $1.60 per share in 1988, from 97 cents per share in 1986.

Carol Neves, vice president at Merrill Lynch Capital Markets, said Ogden's cash flows are impressive, it's a market leader in mass-burn resource recovery plants and 20% earnings gains are expected in the next five years. "Shares are expected to benefit from price-earnings multiple increase as waste-to-energy and toxic waste markets further dominate Ogden's future results," Ms. Neves said.

Analysts say Chairman and Chief Executive Ralph E. Ablon — who presided over the metamorphosis that began in 1981 and was completed this year — and the management team have done a good job on a tough restructuring.

Organized as a public utility holding company in 1939, Ogden through the years acquired a mishmash of companies, from Avondale Shipyards Inc. to Tillie Lewis Foods Inc. to Doggie Diner Inc.

As was the case with many conglomerates, Ogden's performance did not shine. "We looked at what kind of world we would live in and the ideal company for the balance of the century. We discovered that everything we had didn't fit and we had almost nothing we needed to become a total services company," said Mr. Ablon.

By 1980, corporate America was shifting to a service-oriented economy and adopting a back-to-basics strategy, which manifested itself in the shedding of ill-fitting and poor-performing assets and concentrating on operations the company knew best. Ogden joined that bandwagon, and embarked on a major restructuring in 1981.

Today, the company is a shadow of its former self. It will derive less than 5% of its 1987 operating profit from businesses that were part of the company in 1981.

No longer dependent on myriad capital-intensive affiliates, Ogden is a diversified company primarily engaged in providing services in four major areas: operating, project, financial and environmental services. To accomplish that restructuring, several companies have been sold and others were acquired or merged.

A streamlined management structure was put into place. Each unit — Ogden Allied Services Corp., Ogden Environmental Services Inc., Ogden Financial Services Inc. and Ogden Projects Inc./Ogden Martin Systems Inc. — is headed by a president/chief operating officer. All report to Mr. Ablon.

"We see more and more indications that what we did was right. There is no service we cannot and do not perform," Mr. Ablon said.

Net sales and service revenue from continuing operations for the first nine months of 1987 were $636.6 million, up from $616 million in the comparable period of 1986. Operating services revenue was up significantly, primarily reflecting increased revenue in

*Continued on page 56*

## Videos go corporate

**By Marcia Parker**

NEW YORK — Before they know it, institutional investors scouting for investment opportunities and corporate chieftains looking for deep pockets may not have to leave home to find each other.

That's because corporate fund raising has gone video.

"Video is finding its way into every part of our lives — including using videos to raise money from institutional investors. It's a growing part of our business," said David Dreyfuss, president of Broad Street Productions, New York.

Broad Street, which started out as a small in-house Drexel Burnham Lambert Inc. group a few years ago, has grown so much it has been spun off as a separate subsidiary.

Like its many competitors in a very hot field, Broad Street has done videos for a host of companies looking to raise money, including many Drexel clients.

Co-stars of the video Broad Street produced recently for Triangle Industries, the big New York-based packaging firm that was raising $500 million to repay debt and provide working capital, were Nelson Peltz, chief executive officer; Peter May, chief operating officer; and Frederick McCarthy, managing director of Drexel's corporate finance department. The presentation was beamed to 12 cities by satellite from New York, where it went on air before an audience of institutional investors.

"Video has gone from a luxury to being a competitive necessity," Mr. Dreyfuss added.

It's not that road shows, a time-honored tradition that took corporate managements on tour to hawk their wares to investors with money to burn, have gone completely out of style. Many corporate executives prefer to meet investors in person.

"Some CEOs love videos and are gung ho," Mr. Dreyfuss said. "Others have to be convinced."

*Broad Street Productions is one company that struck gold in producing videos for corporate executives eager to seek institutional investors.*

For video lovers, a high-tech version of the road show, complete with smashing special effects, is definitely in.

Corporations increasingly are having private production companies or their investment banker's in-house production team sell the companies via video.

*Continued on page 56*

# Fuel . . .

*Continued from page 55*

"We've been an active player for over five years," said Mr. Schaefer. "We have invested $300 million to $400 million, primarily equity financing, in about 25 projects valued at over $1.5 billion. We're very bullish. In the past two weeks we've closed on a hydroplant in Pennsylvania and a waste-to-energy plant in the Northwest."

Ford Motor Credit has approved equity investments totaling more than $135 million in three projects and there are several other proposals being considered, according to Robert Chambers, manager of financial planning at FMCC.

"We hope to invest a lot more over the years. There's more product out there. Demand is driving facilities across the country. It fills an essential need for the community and the returns are satisfactory," said David Barrett, investment officer, municipal financing at FMCC.

Unregulated subsidiaries being set up to run these plants by major utility companies are emerging equity players. Most of those subsidiaries are limited to 50% ownership, and they look to institutional partners to provide the rest of the financing. In the meantime, GECC and FMCC executives say they are considering providing debt financing in conjunction with the equity financing they provide.

"We are thinking about it. We have proposals in hand," Mr. Schaefer said.

The major insurance companies that have provided mainly debt financing in the past are Prudential Insurance Co. of America, Newark, N.J.; John Hancock Mutual Life Insurance Co., Boston; and Aetna.

"We've invested about $300 million in debt and equity in over $1 billion worth of projects and we'll do more. We have invested predominantly our own money and some money from a small account that we manage of pension funds. These are longer-term investments and appropriate for them," said Herbert Magid, senior investment officer at John Hancock.

Traditionally, the builders of renewable energy industry have relied on tax-exempt debt, which the institutions purchased. But that is changing. Under the new tax law, tax-exempt municipal bonds lost some of their allure, but institutional investors say they are willing to forgo those benefits.

One of the first projects to make the break with traditional financing was Wheelabrator Technologies Inc., Hampton, N.H., which recently financed a garbage-burning plant with taxable paper in a $180 million sale-leaseback transaction (*Pensions & Investment Age*, Oct. 19). FMCC made a $63 million equity contribution, while 11 U.S. insurance companies led by Hancock provided the debt capital.

"The tax treatment doesn't make the project," Mr. Levy said, adding Aetna has invested millions in more than 12 projects. "We just finished our first taxable private placement financing for a county prison cogeneration plant. We'll be seeing more taxable financing." ■

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## Municipal waste-to-energy market: 1985-1996

($ mils.)

| | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total equipment | 328.5 | 134.2 | 403.3 | 650.9 | 1,654.6 | 1,833.1 | 482.1 | 505.9 | 499.8 | 390.4 | 444.4 | 385.8 |
| Total services | 302.4 | 117.7 | 387.6 | 613 | 1,488.3 | 1,609.7 | 444.4 | 462.5 | 468.8 | 355.6 | 415.8 | 355 |
| Building, vehicles, site & spares | 149.1 | 54.1 | 177.1 | 320.1 | 831.1 | 906.2 | 229.5 | 243.6 | 248.4 | 180 | 218.8 | 183.2 |
| Total capital expenditures | 780 | 306 | 968 | 1,584 | 3,974 | 4,349 | 1,156 | 1,212 | 1,217 | 926 | 1,079.8 | 924 |
| Financing | 257.8 | 94.4 | 314.7 | 522.5 | 1,347.2 | 1,471.9 | 384.7 | 403.7 | 406.4 | 308.7 | 306.7 | 308 |
| Total market | 1,037.8 | 400.4 | 1,282.7 | 2,106.5 | 5,321.2 | 5,820.9 | 1,540.7 | 1,615.7 | 1,623.4 | 1,234.7 | 1,385.7 | 1,232 |

Source: Resource Marketing International

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# Rate-sensitive stocks pay off

By Jacqueline Dutton

Institutions were invested heavily in interest-rate sensitive stocks the week before the market crash, a move that proved to be defensive as those sectors were the most buoyant in a sinking market.

The 10 industries in which the institutions were most heavily invested were electric utilities, telephone companies, international oils, major regional banks, domestic integrated oils, food processors, drug companies, retail companies, chemical companies, and computer and office equipment companies.

The institutions were invested in the best-performing industries — seven of the 10 were in the top half of all industries in terms of investment returns for the six days of the market plunge from the opening of the market Oct. 16 through the close Oct. 23.

However, only four of the 10 industries had returns greater than the Standard & Poor's 500 stock index for the period.

According to data provided by CDA Investment Technologies Inc., Silver Spring, Md., institutional investors, including the nation's major pension fund managers, were concentrated in resilient electric utility and telephone company stocks Oct. 15, just before the market's record 508-point drop, although the two sectors were market laggards throughout 1987. Of the 84 industries ranked by CDA, electric utilities suffered the least damage, an average decline of −5.7% Oct. 15 to 23. That compares with −16.8% for the S&P 500 index and −32.7% for aluminum companies, the hardest hit industry.

Rounding off the top five sectors in terms of returns were: breweries, −7%; soaps, −12.9%; natural gas distribution, −12.9%; and miscellaneous financial, −14.7%.

Telephone stocks did relatively well, ranking ninth overall and outperforming the S&P 500 with a one-week return of −16.1%.

"It was a classic flight to quality," said Geoff Johnson, a telecommunications analyst for Argus Research Corp., New York. "Investors were flying into defensive issues such as electric utilities and telephones."

The strongest utility stocks the week of the crash managed to eke out returns on the upside. **Central Maine Power Co.**, **Nevada Power Co.** and **Central Vermont Public Service Co.** recorded gains of 2.7%, 1.3% and 1.1%, respectively. **Southern Co.** and **Sierra Pacific Resources** also held up well; they returned 0.6% and zero respectively.

The best performers among telephone stocks for the week of the crash were: **Bell Canada Enterprises Inc.**, −1.3%; **Bell Atlantic Corp.**, −2.9%; **NYNEX Corp.**, −5.6%; **Rochester Telephone Corp.**, −5.9%; and **Southwestern Bell Corp.**, −6.5%.

Pension funds were also invested heavily in other sectors before the plunge: international and domestic oil, major regional banks, foods, drugs, general retail chain, chemicals, and computers.

All three sectors outperformed the S&P 500. The integrated international oil and major regional bank industries ranked 10th and 11th, respectively, with prices declining, on average, −16.2% and −16.7%.

Among the strongest international oil stocks during crash week were: **Exxon Corp.**, −4%; **Global Natural Resources**, −8.5%; **TransCanada PipeLines Ltd.**, −8.5%; **Mobil Corp.**, −9.6%; and **Chieftain Development Co. Ltd.**, −10%.

Frank Knuettel, a vice president and oil industry analyst at Prudential-Bache Securities, New York, said oil stocks — international and domestic — fell in line with the market during the first part of the slump as over longer periods, oil stocks have a stronger correlation with market movements than changes in oil prices.

But because oil price fluctuations account for some movement in oil stock prices in the short term — a period of days, for instance — he said the oil stocks finished the week strong in reaction to a rise in oil prices.

Joan Goodman, a bank analyst in the Chicago office of New York-based Pershing & Co., said major regional banks such as **Barnett Banks of Florida** better endured the crash than national banks because, for one thing, they were not saddled with South American debt.

She said in her opinion, Barnett Banks is the strongest stock among the lot. Other enduring stocks during the slump were **La Jolla Bancorp**, **Landmark Bancshares Corp.**, **Marine Midland Banks Inc.** and **Horizon Bancorp**.

According to CDA, losses among stocks in domestic integrated oil, food and drug companies were relatively low compared with other industries, but lagged the S&P 500. With returns of −17.2% for domestic oil, −18.8% for food, and −20.3% for drug stocks, the sectors were ranked 13th, 19th and 29th respectively among the 84 industries.

**Sun Co.** was the champion among domestic oil stocks for the week, returning a positive 0.5%. Other strong oil stocks were: **Energy Development Partners Ltd.**, −2.9%; **National Gas & Oil Co.**, −4%; **Union Exploration Partners Ltd.**, −7%; and **Permian Basin Royalty Trust**, −7.7%.

The best-performing food stocks for the period were: **Sara Lee Corp.**, −1%; **Kellogg Co.**, −3.8%; **Quaker Oats Co.**, −4.6%; **H.J. Heinz Co.**, −7.1%; **William Wrigley Jr. Co.**, −7.1%; and **Campbell Soup Co.**, −8%.

Among drug stocks, the top five performers suffered greater losses. The leaders in this industry were: **Smithkline Beckman Corp.**, −5.1%; **Schering Plough Corp.**, −8.6%; **Marion Labs Inc.**, −10.3%; **Novo Industries**, −13.4%; **Merck & Co. Inc.**, −14.3%, and **Pfizer Inc.**, −14.3%.

While many of the industries in which pension funds concentrated stock investments the week of the crash were among the least damaged, the retail chain, chemical and computer company stocks were among the biggest losers, ranking 45th, 63rd, and 75th, respectively, out of the 84 industries. Retail chains returned −22.9% for the week; chemical concerns lost −25.6%; and computer companies returned −27.8%.

Some stocks in those underdog sectors, however, did comparatively well. According to CDA, the top five performers in the general retail chain industry were: **Brad Ragan Inc.**, −2.1%; **Kay Corp.**, −9.3%; **Jewelcor Inc.**, −12.5%; **Pep Boys — Manny, Moe & Jack**, −12.7%; and **Wienar Enterprises Inc.**, −14.4%.

**Publicker Industries Inc.** was the leader among the chemical stocks, returning −7.7%. It was followed by **Essex Chemical Corp.**, −10.1%, **Chariot Group Inc.**, −10.5%; **Hercules Inc.**, −12.8%; and **Stepan Chemical Co.**, −14.8%.

The sturdiest computer stocks the week of the crash were **Dataram Corp.**, −6.7%; **Compugraphic Corp.**, −10%; **Eldon Industries Inc.**, −11.8%; **IBM Corp.**, −13.8%; and **General Datacomm Industries Inc.**, −13.9%. ■

## Top performing stocks by industry

| Industry | Stock | Stock performance 10/16 - 10/23 |
|---|---|---|
| Banks - major regional | Landmark Bancshares | −4.0% |
| | LaJolla Bancorp. | −6.7 |
| Chemicals | Publicker Industries | −7.7 |
| | Essex Chemical | −10.1 |
| Computers | Dataram | −6.7 |
| | Compugraphic | −10.0 |
| Drugs | Smithkline Beckman | −5.1 |
| | Schering Plough | −8.6 |
| Electric power | Central Maine Power | 2.7 |
| | Nevada Power | 1.3 |
| Foods | Sara Lee | −1.0 |
| | Kellogg | −3.8 |
| Oil - integrated domestic | Sun Co. | 0.5 |
| | Energy Develop. Partners | −2.9 |
| Oil - integrated int'l | Exxon | −4.0 |
| | Global Natural Resources | −8.5 |
| Retail - general merchandise chains | Brad Ragan | −2.1 |
| | Kay Corp. | −9.3 |
| Telephone | Bell Canada Enterprises | −1.3 |
| | Bell Atlantic | −2.9 |

Source: CDA Investment Technologies Inc.


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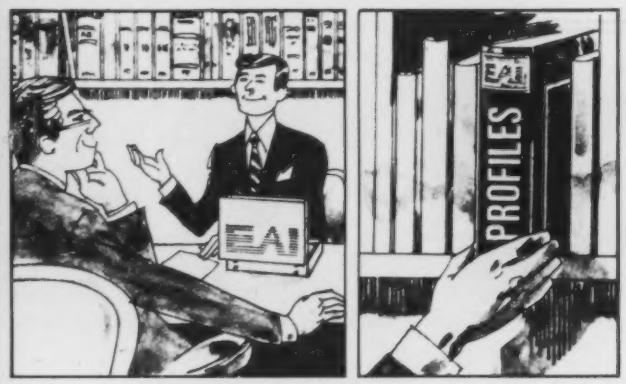


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# Pensions & Investment Age



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The newspaper of corporate and institutional investing • $4.00 an issue • $80 a year • December 14, 1987


# Takeover bill clears hurdle

By Nicky Robertshaw

WILMINGTON, Del. — A draft bill that virtually would eliminate hostile takeovers of nearly half of the companies on the New York Stock Exchange could become law early next year.

The draft, which a unit of the Delaware Bar Association agreed Friday to continue pushing, would not allow a potential acquirer to gain control of a Delaware-incorporated target company for three years unless approved by the board of directors — with certain exceptions.

The proposal still faces internal bar association hurdles and possible redrafting before it is approved as hoped by year's end. Whatever the bar association finally produces almost certainly will be passed into law by the Delaware General Assembly when it reconvenes next month.

The proposal had been circulated within the corporate community and among bar association members. It is similar to, but less severe than, laws in New York and eight other states, and is being pushed by Gov. Michael N. Castle and other state officials eager to protect Delaware companies from takeovers, lest they move their incorporations to states with more favorable protections.

Earlier this year, the bar association unit — the Council of the Corporate Law Section — rejected a statute similar to the Indiana law that was upheld by the Supreme Court in April. That proposal never made it to the Delaware General Assembly.

Of the 27 states that have some sort of anti-takeover statutes, 14 have laws along the lines of Indiana's, while nine have laws similar to the most recent Delaware proposal, according to the Investor Responsibility Research Center, Washington.

Under the proposal, a Delaware corporation could not merge with an "interested" shareholder (that is, a potential acquirer who had received board permission to acquire 10% of the company's stock) for three years after that shareholder passed the 10% mark, unless: The board approved the takeover; the would-be acquirer got at least 90% of the stock as a result of the transaction that moved the shareholder to the 10% mark; or the shareholder already amassed 90% and received the support of a majority of the remaining 10% of outstanding shares.

Because of these exceptions, the Delaware bill is seen as less severe than laws in New York and eight other states.

Still, many pension fund executives and investor groups have lashed out at the proposal, urging the Council of the Corporate Law Section to vote it down on the grounds it ultimately would hurt stock values and inappropriately reduce the shareholders' role in corporate governance.

"To allow an inefficient or incompetent management to entrench itself, in the guise of 'shareholder interests,' will serve to depress stock values and undermine the integrity of our economy," said Dale M. Hanson, executive officer of the more than $43 billion California Public Employees' Retirement System, Sacramento, in a Dec. 3 letter to the Delaware Bar Association council.

"In our view, the draft . . . may significantly harm the value of shareholders' investments in Delaware corporations," he added, noting the California system, rather than being allied with would-be acquirers, is concerned with long-term


*Continued on page 41*


## Inside:


INTERNATIONAL: Tradition, an important component of the British culture, is being broken by some U.K. pension funds now looking to specialized money management firms to replace balanced managers — Page 31.

CASH MANAGEMENT: Radical changes in wire transfer agreements between corporations and their banks could become reality because of proposed revisions to the Uniform Commercial Code — Page 19.

CORPORATE FINANCE: Morrison Knudsen Corp., a major engineering and construction company, is digging its way back to profitability after restructuring resulted in a hefty third-quarter net loss of $68.2 million — Page 25.


# Indiana zaps firms

## Corporate taxpayers lose, state gains, float

By Barry B. Burr

INDIANAPOLIS — Indiana soon will require large corporate taxpayers to remit state tax payments electronically, a move that will cost the companies a total of about $1.4 million each year.

The new law, effective with tax payments accruing after Jan. 1, makes Indiana the first state to eliminate checks for corporate tax payments. An estimated 2,000 to 7,500 companies with operations in Indiana will make their tax payments through the automated clearinghouse.

The corporations' loss will be Indiana's gain: The state's investment income will increase an estimated $1.4 million because funds will be available sooner.

"The effect is a losing proposition" for corporations, said Thomas K. Connery, supervisor-disbursements at Amoco Corp., Chicago, which has a major oil refinery in Whiting, Ind., among other operations in the state.

**Cash management**

"The purpose of the ACH is to get the money faster," said Randolph G. Holt, business administrator, Indiana Department of Revenue. "The real benefit (to the state) is the gain in investment income."

Withholding, sales, corporate income and motor vehicle fuel taxes all will be subject to the electronic payment program. The state collects some $4 billion annually in such taxes, Mr. Holt said, of which about half will come through the ACH collection.

The state Revenue Department in November began notifying large corporate taxpayers — generally those paying more than $10,000 a month in taxes — about the ACH payment requirement.

(Small corporate taxpayers will continue to remit some $2 billion in payments by check to one of the state's three lockbox banks.)

The notification process, still under way, includes bank au-


*Continued on page 41*


# Front running assailed

By Chuck Paustian

Institutional investors are taking aim at front running, contending it threatens the integrity of the auction-market process and might force them to explore other means of executing trades.

Institutional traders and other investment professionals acknowledge front running, in which a broker with advance knowledge of a trade takes a position in order to benefit from the expected price movement, probably is not as widespread as commonly thought.

Yet a recent survey found about half of the institutional traders responding had experienced front running and slightly more than 40% of the brokers considered it to be a problem.

The survey by Trader Forum showed more than one-third of the traders had experienced brokers exchanging information, which was used for trades that reached the floor of an exchange ahead of the original order.

Investment professionals, meanwhile, are warning brokerage firms to address the situation or suffer the economic consequences.

Both sides "have to sit down and, if there is a problem, recognize the problem . . . then deal with it," said John J. Morton,


*Continued on page 41*

# Allegis shifts $1.4 billion

By Chuck Paustian

CHICAGO — Completing a two-year, round-trip passage, Allegis Corp.'s $1.6 billion defined benefit plans have re-entered the capital markets with 11 new investment managers, following an earlier move to cash equivalents from multiple managers in anticipation of plan terminations.

David J. Dykstra, director-pension assets for the Chicago-based parent company of United Airlines, oversaw the most recent hires, which allocated about $1.4 billion among seven equity and four fixed-income managers.

"I'm very happy with the firms we've selected," said Mr. Dykstra. He added the fund's consultant, Frank Russell Co., Tacoma, Wash., provided information on various firms, but the review and selection process was conducted internally.

Mr. Dykstra declined further comment on the restructuring.

The equity managers hired were Cambiar Investors Inc., Englewood, Colo.; First Manhattan Capital Management, McCowan Associates Inc. and Weiss, Peck & Greer, all in New York; Hotchkis and Wiley, Los Angeles; Lincoln Capital Management Co., Chicago; and Sit Investment Associates Inc., Minneapolis.

The fixed-income managers hired were Sanford C. Bernstein & Co. Inc., W.R. Huff Asset Management and J.P. Morgan Investment Management Inc., all in New York, and Pacific Investment Management Co., Newport Beach, Calif.

The amounts allocated to each of the new firms were not available. According to data provided by Allegis, the defined benefit plans had $1.8 billion in assets as of Sept. 30, of which $792 million was in equities and $630 million was in fixed income.

As a result of the markets' turmoil during October, total defined benefit assets declined 11.1% to $1.6 billion as of Nov. 1.

The assets given to the managers apparently came from a $700 million stock-index fund run by Wells Fargo Investment Advisors, San Francisco, and a $700 million in-house fixed-income portfolio. According to the Allegis data as of Sept. 30, Wells Fargo no longer was listed among the fund's managers, the index fund had been reduced to $300 million and the internal bond portfolio had been eliminated.

The fund's three real estate equity managers — LaSalle Advisors Ltd., Chicago; PMRealty Advisors, Newport Beach, Calif.; and RREEF, San Francisco — apparently were not affected. The three firms run a total of $200 million for Allegis.

Hiring the new managers completes a major task Mr. Dykstra faced when he first joined Allegis in September 1986. Mr. Dykstra replaced Robert J. Gillette, who left to join Russell as vice president-client executive and senior investment consultant.

Allegis, formerly UAL Inc., had released the vast majority of its previous stable of 20 managers and moved the bulk of the pension assets into short-term instruments during the second half of 1985.

Allegis' 1986 annual report shows the pension fund was 86% in cash equivalents and short-term instruments, 3% in common stock and 11% in real estate and other investments.

*Allegis has come full circle, putting $1.4 billion in pension assets back into the markets.*

The changes were made in anticipation of terminating five plans to recoup about $962 million. At the time the terminations were announced, the expected reversion was considered by some

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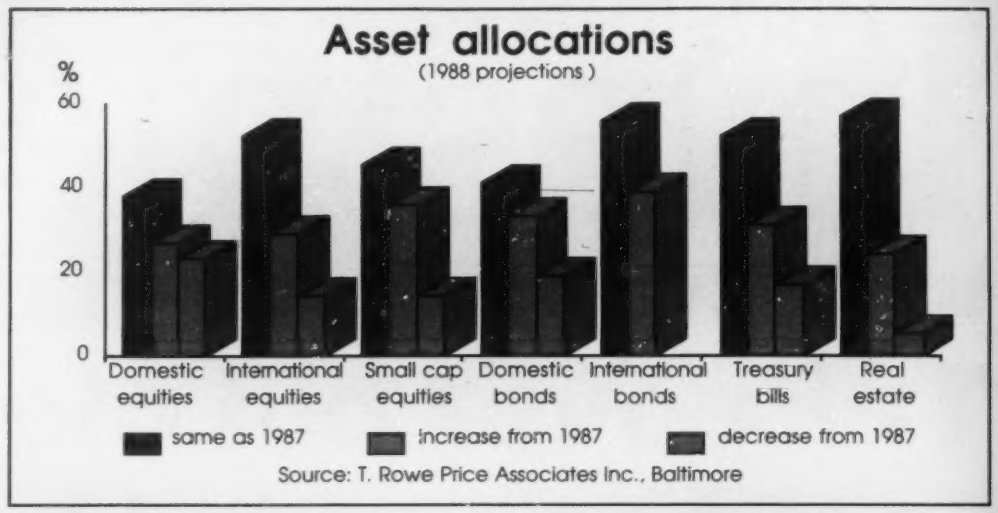


Source: T. Rowe Price Associates Inc., Baltimore

# Execs conflict on crash effect

By Marlene Givant

Senior corporate executives are pushing their pension funds toward more conservative investments because they fear further market volatility, but pension executives are more optimistic.

A comparison of two post-crash analyses underscores the conflict.

A study by Salomon Brothers Inc., New York, says 1987's stock market crash highlights the vulnerability of pension surpluses, which will further catapult the pension fund to the forefront of corporate planning and will lead many funds to more conservative asset allocation postures.

But the analysis by T. Rowe Price Associates Inc., Baltimore, says pension officials are cautiously optimistic about the market and willing to pursue investments from small-capitalization equities to foreign bonds.

Robert D. Arnott, vice president of Salomon and a co-author of the firm's survey of large corporations, said the reports differed because Salomon focused more on views of senior corporate officials worried about their fiduciary responsibilities while T. Rowe Price surveyed pension executives, who balance fiduciary duties and long-term investment planning.

"There is a fascinating dichotomy between the views of pension executives and top management. More typically, top management's fiduciary concerns have a greater impact. We're seeing a pretty widespread shift to conservatism" by top executives, he said.

Pension executives, on the other hand, "have a wide range of views. Where there is a profound shift to conservatism, it is in some instances imposed on pension executives," Mr. Arnott said.

Knee-jerk reactions to fear about the market could have bleak consequences. "This shift has us somewhat uneasy," he said. "It has the risk of becoming a self-fulfilling prophecy."

Views on asset allocation range widely regardless of a plan's funded status; the majority of executives are sitting back and studying the situation, according to Mr. Arnott.

But a surprisingly large minority is taking action, often shifting to conservatism. One radical approach is the reported sale of all stocks held by the pension funds of Rockwell International Corp., Pittsburgh, and Primark Corp., Detroit (*Pensions & Investment Age*, Nov. 30). More typically, funds become defensive by moving 10% to 20% to fixed income from equities.

The Salomon report noted the conservative move began before the crash, independent of market outlook. The report suggested funds evaluate their risk tolerance

*Continued on page 38*

# Wall Street earnings to dive

By Marcia Parker

**Although the investment banking industry escaped wholesale downgrades, firms must tighten their belts or face more ratings pressure; story on page 16. E.F. Hutton Group's asset management division will be left intact after the company merges with Shearson Lehman Brothers in January; story on page 17.**

NEW YORK — Wall Street investment banks, already reeling from the stock market crash and industrywide retrenching, will see earnings plunge 35% to 40% by 1991 because of eroding industry economics and the lackluster performance of interest-rate sensitive businesses that once contributed mightily to the bottom line.

"The inherent cyclicality of the investment banking industry, dormant throughout most of the 1980s, is re-emerging," according to an extensive report by Michael Goldstein, who follows the investment banking industry for Sanford C. Bernstein & Co. Inc., a New York investment research and management firm.

"An environment of generally rising interest rates and declining

*Continued on page 34*

The *P&I Age* monthly indexes track the changes in the Standard & Poor's 500, Frank Russell Co.'s Russell 3000 stock index, the Ryan Index of fixed-income securities, the Shearson Lehman Government/Corporate bond index and the Salomon Brothers Broad Investment Grade bond index.

**P&I Age November indexes**

| | Latest mo. | Year to-date | Trailing 12 mos. |
|---|---|---|---|
| S&P 500 | −8.25 | −2.19 | −4.69 |
| Russell 3000 | −29.84 | −5.08 | −7.65 |
| Ryan Index | 0.15 | −0.75 | −0.71 |
| Shearson Lehman Gov't./Corp. | 0.63 | 0.92 | 1.29 |
| Salomon BIG | 0.83 | 1.36 | 1.70 |

Source: Rogers, Casey and Barksdale Inc., and Frank Russell

**The Salomon BIG data in the Nov. 16 issue were incorrect. The correct figures are: latest month, 3.66; year to date, 0.53; and trailing 12 months, 2.39.**

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Vol. 15, No. 26 — Pensions & Investment Age (ISSN 0273-5466) is published bi-weekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1987.

# Crash a boon to 1 strategy

By Fred Williams

Even though the rest of the stock market was in disarray, domestic securities lending programs produced up to 50% more income than usual during October and November because demand for available securities to cover short positions increased as the market dropped.

In addition, this low-risk way of generating incremental income became even safer during the market crash because the securities lent were overcollateralized.

George Ominski, principal with Capital Advisors Inc., a Lancaster Pa., investment management firm and one of the few non-bank securities lending firms, said income from securities lending programs probably jumped by "half as good again on a month-to-month basis. If they were getting 50 basis points, it was probable they jumped up to 75 basis points following the market action."

Many pension executives were unable to provide hard data on their securities lending programs, explaining there is a two- to three-month lag in receiving figures.

But Ray Fleming, administrator of the $604 million Dallas Employees' Retirement fund, said the fund netted about $15,000 from securities lending in October and November. That represents 37.5% of the $40,000 the fund has earned on the program so far this year.

The fund's program, which involves $20 million to $150 million worth of securities, is limited to U.S. government securities, which Mr. Fleming said are "easier to lend" in the current market environment.

Industry officials believe other pension funds experienced similar income increases from securities lending.

"I would be very surprised if they didn't see a significant spurt in earnings in the October and early November time period," said Nancy Wolcott, vice president for master trust and special services at Harris Trust & Savings Bank, Chicago. "Demand increased and the spreads were up as well, and the brokerage firms were willing to pay a little more in order to cover their positions."

Steven Cox, assistant vice president of DeMarche Associates, Kansas City, Mo., said custodian banks were able to generate additional income "because brokers needed to borrow additional securities to cover short sales at that time, and there probably was a jump in borrowing activity."

Securities lending is a byproduct of increased trading volume during the past 10 years; demand has increased for deliverable securities that are borrowed, for a fee, on a short-term basis. Securities lending transactions usually are handled by custodian banks, with the income split between the bank and the investor. Some pension funds find the returns offset master trust/custodial fees.

When securities are lent, the brokerage normally puts up 102% of the market value of the borrowed securities as collateral, either in cash or in government securities.

As the market value changes, the collateral is adjusted until the transaction is settled.

Because stocks declined dramatically in October, custodial banks found their securities lending programs overcollateralized, making a relatively safe investment technique even more secure, said Mr. Cox.

Cash collateral usually is invested by the custodial bank generating additional income for securities lending with a portion rebated to the brokerage firm. In October, as demand for lendable securities increased, the spreads on short-term money also increased. When the demand for securities jumped, brokerage firms were willing to take smaller rebates, leaving more for the lenders, said Mr. Cox.

As an additional security measure, he said, some bank trustees shifted collateral requirements to 100% cash.

"The only risk associated with it is if the brokerage firm happens to go under, which is a minor risk. Even if they do go under, we still hold 102% of the value of the security," said Louise Graham, vice president and director of master trust services at First RepublicBank Dallas. First Republic has about $12 billion of assets in its securities lending program.

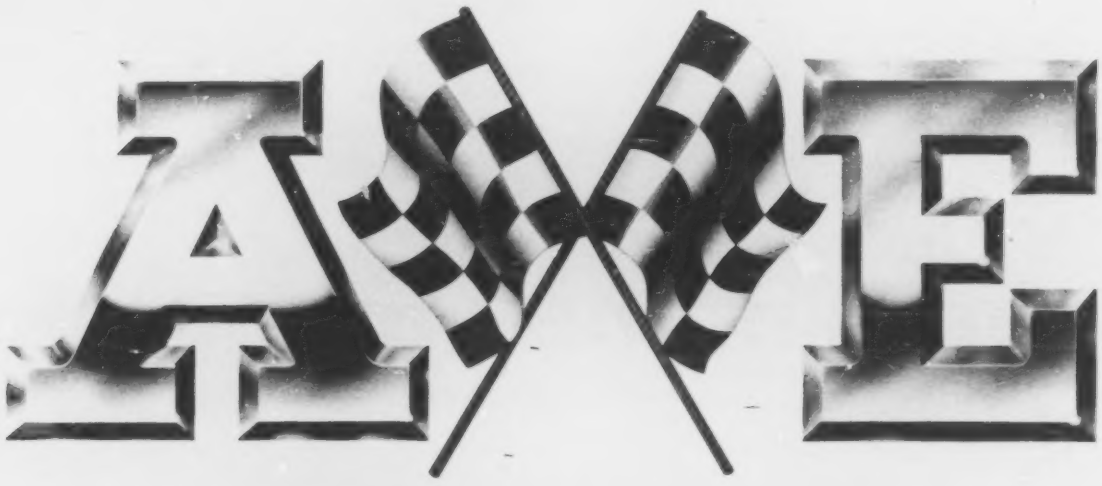
"It is not so much an incremental increase in our overall rate of return, as much as income to offset certain expenses of the fund," said Nathaniel Duffield, chairman of the profit-sharing committee at The Halliburton Co., Duncan, Okla.

Halliburton has hired First RepublicBank for a new securities lending program, which would involve $700 million of the company's $2 billion in employee benefit assets.

"We felt we could generate additional income for the fund at a reduced risk. We don't have a feel yet or an estimate for the type of income it will produce. It really depends on market conditions and on the supply and demand for securities as well as on the specific portfolio mix at the time the securities are loaned. But we felt it would generate enough income to be workable for us," he said. ■

## Corrections & clarifications

- Because of a compilation error, the broad market index returns furnished by **Morgan Stanley Capital International** and reported Nov. 16 were in error. The World index was down 17.1% for October and the Europe Australia Far East index was down 14.1%. Individual market figures were correct.
- **Sunburst Bank** is based in Jackson, Miss. The location was misidentified in the Nov. 16 PIPER listings.
- The investment returns of **MTrust Austin**, Texas, were omitted inadvertently from the Nov. 16 PIPER listings. MTrust's growth fund was up 48.6% for the 12 months ended Sept. 30, ranking it in the top 10% for the period. For three years, it was up 29.5% compounded annually, and for five years it was up 25.5% compounded annually; both figures placed it in the top 25% for the periods.
- **Argus Investment Management Inc.**, Santa Barbara, Calif., which was acquired from Argus Research Group, has investment policy autonomy from Argus Research, although it retains the Argus name under a royalty agreement. The relationship was described incorrectly in the Nov. 16 issue.
- **Alan D. Lebowitz** has been named deputy assistant secretary of program operations of the Pension and Welfare Benefit Administration at the Department of Labor. His new title was reported incorrectly in the Nov. 30 issue.

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# Earnings . . .

*Continued from page 2*

financial asset prices will narrow the earnings of many investment banking activities," the report said.

The universe of investment banks Mr. Goldstein studied includes Salomon Brothers Inc., Goldman, Sachs & Co., First Boston Corp., Morgan Stanley & Co., Bear Stearns & Co., Kidder Peabody Inc., Dillon, Read & Co. Inc., Lazard Freres, L.F. Rothschild and Wertheim & Co. It does not include Merrill Lynch, Drexel Burnham Lambert Inc., Shearson Lehman Brothers Inc. and Donaldson Lufkin & Jenrette.

The industry's difficulties also stem from the erosion of the level and structure of investment banking in the 1980s. Mr. Goldstein said profit margins have declined 20% to 30% and returns on equity have fallen to 15% from 30% on an equity base that has grown sevenfold. At the same time, the fixed component of expenses has grown to $4 billion from $800 million, increasing the industry's breakeven point fivefold.

"This substantial degradation in the economics of the industry is a direct result of the rising dominance of market-making," Mr. Goldstein's report said.

"The trading and arbitrage of debt and equity securities is now inextricably intertwined with corporate investment banking services. A major position in a wide range of secondary markets is needed to support not only primary issuance, but the reputation and image of the firms themselves."

All these factors will combine to exert enormous pressure on investment banking firm managers in coming years. In Mr. Goldstein's view, the end result is management will assume a greater degree of centralized control and shrink operations to focus on the areas where the firm is strongest.

Interest-rate sensitive businesses he said will be affected by the changing environment — including underwriting, mergers and acquisitions, leveraged buyouts and bridge financing — are the lines of business that contributed most to industry earnings in the past few years.

Despite anticipated cost reductions, the poor performance of these businesses will result in earnings declining 35% to 40% from the 1986 peak and a forecast 1991 trough, Mr. Goldstein predicts.

He expects industry earnings to drop about 15% in both 1987 and 1988, with moderate drops continuing through 1990. The investment banking group currently is valued at 6.5 to 8 times Mr. Goldstein's estimates for 1988 earnings.

A more severe drop is unlikely, he said, because most lines of business move with the credit cycle, some businesses are countercyclical and there is still room for cost cutting.

He said future performance of the major public investment banking firms primarily will be a function of revenue and profit mix and management skill.

His predictions for specific firms include:

- First Boston's earnings will be cyclical with higher interest rates, declining 15% in 1988 and an additional 12% to 15% in 1989. Trough earnings in 1990 should be 45% below 1986's peak levels with a 10% to 15% reduction in total expenses.
- Morgan Stanley's near term earnings also are expected to decline significantly off 1987's peak as bridge financing, related non-investment-grade debt underwriting opportunities and equity underwriting wane. Earnings will fall 20% to 25% in 1988 and an additional 10% in 1989 as interest rates rise and equity markets remain depressed. He expects continued strength in foreign exchange and commodities trading, a significant asset management business and a moderate rebound in debt trading profitability. Trough earnings in 1990 are expected to be 30% to 35% below 1987's peak, contingent on an 8% to 10% reduction in total expenses.
- Salomon Brothers, already hit by the emerging cycle in the industry, is likely to experience the least cyclicality going forward. Earnings should roughly double in 1988 and improve an additional

*Continued on page 35*

**Large investment banks domestic profitability trends (1985 - 1992E)**

| | 1985 | 1986 | 1987E | 1988E | 1989E | 1990E | 1991E | 1992E |
|---|---|---|---|---|---|---|---|---|
| Gross income after inventory carry ($ bil.) | $6.8 | $8.5 | $8.4 | $8.7 | $8.5 | $8.0 | $10.0 | $13.5 |
| Pre-tax net income ($ bil.) | $1.8 | $2.1 | $1.5 | $1.5 | $1.4 | $1.4 | $2.2 | $3.6 |
| Pre-tax profit margin | 26% | 24% | 18% | 17% | 16% | 18% | 22% | 27% |
| Average shareholder's equity | $4.7 | $6.2 | $7.8 | $8.7 | $9.5 | $10.4 | $11.8 | $13.9 |
| After-tax return on average shareholder's equity | 22% | 20% | 12% | 12% | 9% | 9% | 12% | 17% |

E - estimate
Source: FOCUS Database, Bernstein estimates

# Allegis . . .

*Continued from page 2*

analysts to be a key component in financing the company's expansion plans.

Separate lawsuits filed by employee groups representing the pilots and flight attendants, however, delayed the reversions. Ultimately, the plans were not terminated.

The inability to recover the surplus pension assets forced company officials to turn to other financing means, including a $243 million issue of common stock during the fourth quarter of 1985.

The decision to forgo the terminations also meant the pension assets would have to be moved out of cash and re-invested in the financial markets.

By the end of September 1986, Mr. Dykstra had placed 44% of the then $1.6 billion defined benefit assets in the stock index fund, 44% in internally managed fixed-income instruments and 12% in real estate equity. ■


THE SWIFT. THE BRILLIANT.

# Earnings . . .

*Continued from page 34*

20% in 1989 as the trading environment improves marginally, and appropriate trading strategies are effected. Earnings should remain essentially flat in 1989-'90 at a level 30% to 35% below the peaks of 1985-'86 as the firm is exposed to cyclical declines in debt underwriting and mortgage finance. Trough earnings 33% below 1985's peak assume a further 10% to 12% expense reduction.

"Investment bank earnings have historically been correlated with large movements in interest rates. It has not been debt trading alone that caused this sensitivity; rather, a wide and growing range of investment banking activities, such as debt issuance, are directly related to rates or are indirectly sensitive, like mergers and acquisitions," Mr. Goldstein's report said.

"We believe a continuance of the rising rate environment, and an associated moderate further decline in the equity markets, will have negative profit implications for underwriting activity, mergers and acquisitions and leveraged buy-out activity, as well as equity market-making profits. In addition, the mortgage finance business should also emerge as quite cyclical with the housing market."

He projects a $200 million pretax loss in 1987 for debt market-making, but looks for the business to recover next year.

"Even in the face of rising rates, debt market-making will recover in 1988-'89 to produce commodity-level rate of return. Trading strategies will be adjusted, and the secular trend toward rising turnover will continue, though at a slower rate," the report said. "We expect a recovery in 1988 that will produce a positive swing of $400 million, without which industry earnings would be down almost 30%."

He said underwriting, especially of debt, has peaked, and earnings from this line of business will drop sharply in 1988.

"We believe a cyclical slowdown in issuance in 1988 will lead to an earnings collapse in the fixed cost intensive underwriting business from $450 million to $500 million in 1987 to about $100 million in 1988. We expect profits to remain at this level in 1988-'89," the report said.

Mergers and acquisitions advisory and financing fees and risk arbitrage profits provided a third of the industry's profit growth in the past several years, Mr. Goldstein noted. He thinks the recent decline in the equity markets may prompt a "bubble in merger and acquisition activity to occur in the near term." But over the longer term, he believes higher interest rates will reduce the level of activity. His forecast is for overall transaction volume to decline to $160 billion in 1988 and $150 billion in 1989 from $180 billion this year. Earnings will fall to $570 million in 1988 and $400 million in 1988 from about $720 million in 1987.

During the next five years, market-making activities are expected to grow in importance relative to other investment banking activities. "The importance of market-making should be further exaggerated by a cyclical decline in underwriting and advisory activities," the report said. "Absent a success of a major new innovation, such as the emergence of a large market for less-developed-country debt or commercial bank loans, we believe the average rate of return from market-making will be limited to a level similar to that normally earned by commercial banks, thereby further reducing overall rates of return."

Historically, commercial banks have made, after tax, 12% to 13% return on equity, Mr. Goldstein said. ■

**Large investment banks domestic profitability analysis (1985- 1992E)**
**(Percentage of total)**

| | 1985 | 1986 | 1987E | 1988E | 1989E | 1990E | 1991E | 1992E |
|---|---|---|---|---|---|---|---|---|
| Equity market-making and investment | 5% | 4% | 1% | 4% | 1% | −4% | 18% | 14% |
| Debt market-making and arbitrage | 23 | 7 | −14 | 13 | 14 | 25 | 31 | 14 |
| Other trading | 9 | 8 | 12 | 15 | 22 | 28 | 20 | 12 |
| TOTAL MARKET-MAKING CONTRIBUTION | 38 | 19 | −1 | 32 | 38 | 50 | 69 | 40 |
| Underwriting | 22 | 28 | 32 | 6 | 6 | 7 | 8 | 25 |
| M&A and related income | 37 | 40 | 48 | 37 | 29 | 18 | 3 | 13 |
| Private placements/other advisory | 9 | 15 | 12 | 12 | 10 | 11 | 6 | 9 |
| TOTAL INVESTMENT BANKING CONTRIBUTION | 68 | 83 | 91 | 56 | 45 | 36 | 16 | 48 |
| Asset-based revenue | 10 | 12 | 23 | 25 | 32 | 28 | 24 | 17 |
| All other - net | −15 | −14 | −13 | −13 | −15 | −14 | −9 | −5 |
| Pre-tax broker/dealer income | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

E - estimate
Source: FOCUS Database, Bernstein estimates


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*Pensions & Investment Age* will profile the top 1,000 pension funds in the Jan. 25 issue

C2710-2 - 12/30/87

Pensions & Investment Age

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The newspaper of corporate and institutional investing • $4.00 an issue • $80 a year • December 28, 1987

# Owens-Illinois sub offers mutual funds

By Marlene Givant

TOLEDO, Ohio — Owens-Illinois Inc.'s investment management subsidiary, Harbor Capital Advisors, will offer five new mutual funds to participants in Owens-Illinois' savings plans, plans of other companies and other outside investors.

The five funds will join Harbor's previous offering to form a family of mutual funds spanning several asset classes and investment styles, according to Ronald C. Boller, chairman and director of Harbor and director-benefit finance of Owens-Illinois.

The pioneer fund, Harbor Growth, was formed last December (*Pensions & Investment Age*, Dec. 22, 1986). So far, only 3% of the $100 million mutual fund's assets have come from outside in-

*Continued on page 43*

# Outlook:

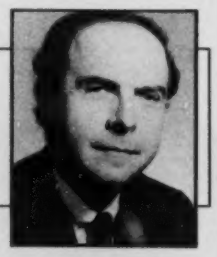
THE ECONOMY: What does 1988 hold? Good times or bad? New booms or new crashes? For the answers, *Pensions & Investment Age* goes to the experts. Their views in a nutshell are offered below; the story is inside — Page 3.

"IT'S AN ELECTION YEAR and I think efforts will be made to keep interest rates down."

**Robert Chandross**

"WHAT THE MARKETS really are looking for is some discipline from Congress."

**David Littman**



"THE ODDS (OF A RECESSION) are 50-50. . . . The conditions in the financial markets could well precipitate a recession."

**Robert Dederick**

"NEVER UNDERESTIMATE what a politician will do in an election year."

**Thom Brown**

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# Budget details pummel funds

By Nicky Robertshaw and Joel Chernoff

WASHINGTON — The budget reconciliation law passed by Congress last week hit defined benefit plans with a double whammy, raising costs for employers and increasing the year-to-year variability of pension fund contributions.

The law, signed by President Reagan Dec. 22, tightened minimum and maximum funding rules, increased the annual premium employers must pay to the Pension Benefit Guaranty Corp. to between $16 and $50 per participant from a flat $8.50, and reduced the period over which past-service liabilities and experience losses in pension funds can be amortized.

The legislation, however, lacks key provisions that would have allowed employers to recoup surplus pension assets without terminating their plans; it also is missing provisions requiring a portion of the surplus to be allocated to plan participants.

The legislation has its greatest impact on sponsors of poorly funded defined benefit plans. It increased pension contributions, premium payments and potential liability to the PBGC and plan participants. It also may affect their creditworthiness.

But the legislation will hit all employers, such as those who flip in and out of the narrowed minimum and maximum funding ranges.

The new funding rules are creating a "Goldilocks effect," explained Henry Savath, vice president at A. Foster Higgins Co., the employee benefit unit of Johnson & Higgins, New York. "It can't be too great, it can't be too little, it has to be just right."

Many of the details of the rules were not available at press time. But major provisions are:

- Tougher minimum funding rules will accelerate funding for some employers. Past-service liabilities will have to be funded within 18 years, instead of the current 30 years. Also, experience gains and losses will have to be amortized during five years, instead of the current 15 years. Faster funding rules will apply to underfunded plans.
- Employers will lose deductibility for contributions when funding exceeds 150% of termination liability. The Internal Revenue Service, however, is required to issue regulations altering the limit for employers whose funding would be distorted by such a rigid limit, such as those with very young work forces whose permissible contributions would be sharply reduced under the 150% rule.
- Employers will have to make quarterly payments on their pension contributions; current rules give companies up to 8½ months after the end of the plan year. Estimated payments will be made when the actual contribution has not yet been determined.
- The number and the availability of funding waivers to employers will be limited and amortization of the waived payment will be spread over five years rather than 15 years as now required.
- The ability to terminate an underfunded plan will be further restricted. Under legislation passed in 1986, an employer could dump its underfunded plans on the PBGC under several conditions, including a filing under federal bankruptcy code. Now, the employer also will have to prove financial hardship or meet other criteria. Also, employers terminating underfunded plans

*Continued on page 46*

# LDC debt's fallout

## Banks' woes could hurt asset-backed ratings

By Jacqueline Dutton

A new wave of concern over the health of U.S. banks burdened by Third World debt is threatening to knock billions of dollars worth of asset-backed securities supported by those banks down the ratings ladder.

The ability of the banks to ensure payment on pools of asset-backed securities is being challenged by Moody's Investors Service Inc., New York, which recently placed more than $6 billion of investment-grade, asset-backed securities on its "structured-finance watchlist" for possible downgrading.

As a result, institutional investors, who are big buyers of asset-backed securities, may feel compelled to unload those issues and may have to pay more for high-quality issues to replenish their portfolios. Many institutional investors are barred from investing in anything but the highest quality issues.

William F. Quinn, assistant treasurer at American Airlines, Fort Worth, Texas, said the value and risk characteristics of the underlying securities and issuers of securities are most important in rating the quality of asset-backed securities.

But Mr. Quinn said a downgrading caused by the banks that support the securities could force him to sell the $3.2 billion fund's $100 million in mortgage-backed securities if the ratings fell below investment grade.

He noted the secondary market for "fallen angels" is weak. He also warned wholesale downgrading of structured financings backed by banks exposed to LDC debt could mean higher prices for investment-grade issues.

But David Bronner, chief executive officer of the $6 billion Retirement Systems of Alabama, Montgomery, said a bank credit-related downgrading would do little damage to the high-quality, low-risk type of mortgage-backed securities portfolio managed by his staff. Mr. Bronner could not break out the amount his fund held in mortgage-backed securities.

Mr. Bronner said for a highly diversified, long-term portfolio, the banks' role as an insurer is not as important as it is for a new issue upon which little principal has been paid.

He said if the credit-providing bank "hit the wall" because of LDC debt, the effect on the quality of a four- to seven-year pool with a high loan-to-value ratio would be minimal.

Issuers of asset-backed securities say the potential downgrades undermine the market for otherwise low-risk investment pools, and as a result they

*Continued on page 41*

# Firms shielding cash portfolios

By Chuck Paustian

Confronted with an uncertain economy, companies with large cash reserves continue to play it safe.

And those that do take advantage of the vast size of the cash portfolios — using a portion of their portfolios for higher-yielding instruments and turning to outside investment firms — may return to the safe harbors of more traditional investments after recent market volatility.

Significant amounts of surplus corporate cash present a financial executive with two options — use the cash to meet the company's capital needs and curtail external financings or keep the funds as a reserve and continue to pursue borrowing opportunities.

As a result, corporate executives attempt to preserve this maneuverability, often being willing to forgo enhanced performance in favor of safe, liquid investment vehicles, such as domestic commercial paper, bankers acceptances, Treasury bills and certificates of deposit. The investments usually are managed internally.

When Chicago-based Amoco Corp. decided to repurchase some of its stock, company officials decided to draw the necessary funds from the corporate coffers rather than further leveraging the company by borrowing, according to John J. Murray, director of short-term investing and borrowing.

Amoco has purchased 34.6 million shares of stock at a total cost of $2.043 billion. As of Sept. 30, the company's cash and short-term investments totaled $1.361 billion, up from $772 million a year earlier.

American Telephone & Telegraph Co., New York, has been able to curtail some of its financings, having amassed a cash position of $2.91 billion as of Sept. 30, the result of strong cash flows during the past several years.

David W. Reiss, corporate assistant treasurer, said the cash position "permits the company to go into the markets when it wants to, rather than being forced into it," he added.

Mr. Reiss added AT&T does maintain a presence in the market through a commercial paper program, which ranges between $200 million and $400 million.

T.P. Townsend, an assistant treasurer at Exxon Corp., New York, said the company's $3.02 billion cash position allows company executives to be more selective in its financing.

"At the time we had $3 billion in cash, we were borrowing both short- and long-term all around the world," he said. "As an attractive opportunity comes along, we'll borrow and maybe repay some more expensive borrowings.

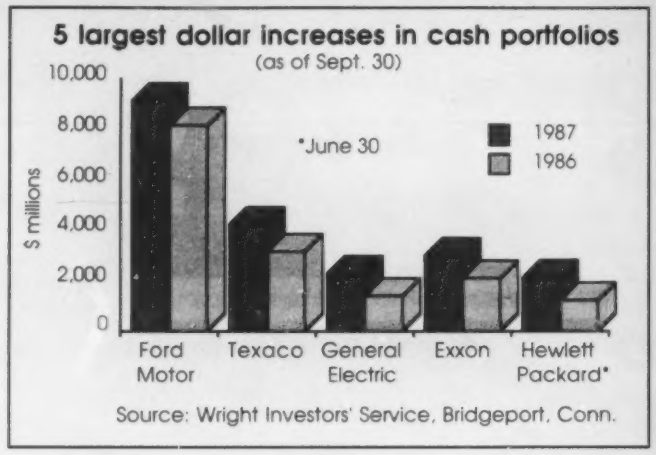
"We continually look for opportunities and actively manage the debt," he added.

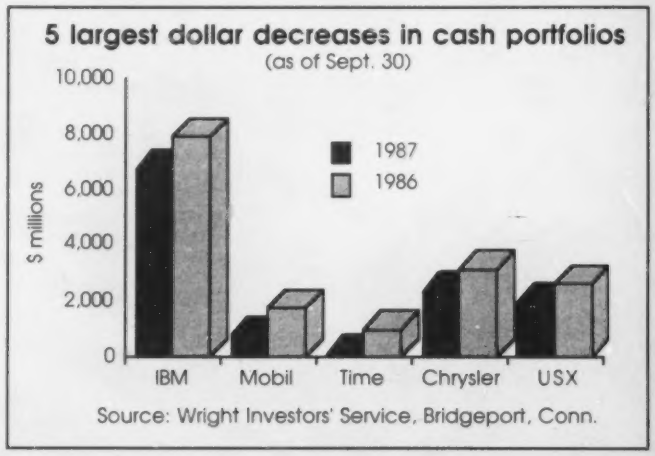
James Lyness, manager-market strategy and cash forecasting at Chevron Corp., San Francisco, said the company uses a similar strategy. While Chevron's $3.556 billion cash portfolio is used to service the company's debt, executives are constantly looking for more attractive opportunities.

"If you saw interest rates rising, you might do some swaps or term financing to lock in the current rates and not have to pay higher rates six months from now," Mr. Lyness said.

He added the cash also serves as a hedge against rising interest rates for Chevron's floating-rate debt, much of which was incurred as a result of the merger with Gulf Oil Corp. He said enhanced in-

*Continued on page 42*




# Plans boost real estate capabilities

By John Covaleski

As pension fund investments in real estate have grown, so too has their executives' involvement in real estate investment decision-making.

Although several dozen pension funds have one or more specialized real estate investment staff members to oversee the fund's outside real estate managers, some are creating internal real estate operations that analyze deals brought to them by outside managers or, in a few cases, find and make the deals themselves.

**Real estate**

Among the leaders:

- The pension fund of General Electric Co., Stamford, Conn., is the grandaddy of internal real estate departments. Operating since 1953, the 10-person staff is responsible for a $3 billion real estate portfolio, about evenly divided between solely owned properties and partnerships with developers and other investors. No outside managers are used.
- A 20-member staff at the State Teachers Retirement System of Ohio, Columbus, seeks and closes on property either co-invested with other pension funds or acquired solely by the fund. Ohio Teachers, which has $1.3 billion in real estate, also has some money in commingled real estate pools for diversification.
- Tom Hassard, real estate investment director and sole real estate staff member of the Virginia Supplemental Retirement System, Richmond, analyzes deals from non-discretionary managers and has begun entering the fund into its own development deals. He now is soliciting construction bids for the fund's first independent project, a $6 million parking garage.
- The staff at American Information Technologies Corp., Chicago, with $700 million in real estate, seeks and structures its own deals, primarily as joint ventures with developers or in co-investments with other pension funds. It also does a full internal analysis of deals brought in by managers. Tom Thompson, director of real estate investments, works on the fund full time and uses the services of the fund's analysts.
- The three-person staff of the Florida State Board of Administration, Tallahassee, reviews all proposals from its managers, who do not have discretion. The board has $650 million in real estate.
- Until this year, the five-member real estate department at the Wisconsin Investment Board, Madison, had been charged with finding its own investments for its $350 million real estate portfolio. Now, the staff analyzes and oversees investments from managers hired on a non-discretionary basis.
- The five-member staff at the California State Teachers' Retirement System, Sacramento, analyzes the deals of managers without discretion.

*Continued on page 40*

# State funds mortgages

By John Covaleski

HARTFORD, Conn. — The $5.3 billion State of Connecticut Trust Funds will invest $800 million in commercial mortgage loans during the next five years in what could be the first step in a trend of pension funds moving more heavily into commercial mortgage lending.

David Hartzell, a vice president of real estate research at Salomon Brothers Inc., New York, said a large-scale pension fund movement into commercial mortgages is expected because real estate debt has been outperforming real estate equity and because commercial mortgages, if structured correctly, provide added diversification and a safe yield.

Specific figures comparing the performance of real estate debt to real estate equity were not available, but preliminary findings of a report show superior debt performance, Mr. Hartzell said.

Assets for the commercial mortgage loans will come from the Connecticut funds' fixed-income portfolio, which as of Oct. 31 accounted for 39% of total assets, or $2.1 billion. The fund is looking for mortgages of five to 10 years with yields 100 to 120 basis points higher than Treasury bills of the same maturity, said Robert A. Staley, investment officer-real estate.

This action represents the fund's first investment in commercial mortgage lending. It has, however, originated mortgages on in-state residential property and has about 1% of its assets, or $53 million, invested in mortgage-backed securities issued by the Government National Mortgage Association and the Federal Home Loan Mortgage Corp.

Mr. Staley said his fund may be interested in ultimately packaging and selling parts of the commercial mortgage portfolio it builds. In March, the fund issued $252 million in collateralized mortgage obligations from its in-state residential mortgage portfolio (*Pensions & Investment Age*, April 6).

Connecticut's commercial mortgage fund will consist primarily of fixed-rate mortgages without ratings, but could include participating mortgages if the participation does not exceed 50% of the property's cash flow, Mr. Staley said. Mortgages with more than 50% participation would be considered part of the fund's real estate equity portfolio, he said.

The commercial mortgage portfolio will represent about 10% of the Connecticut fund's total assets by the time it's fully funded.

Investment managers hired for the portfolio also will have property management ability in case of problems with payments, Mr. Staley said. "We will not lend on any properties that we wouldn't want to own," he added.

The portfolio's first mortgage has been closed on an undisclosed Phoenix, Ariz., property in a deal arranged by Aldrich, Eastman & Waltch, Boston.

Rosalie J. Wolf, principal at Aldrich, Eastman & Waltch, said

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## Highlights

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Vol. 15, No. 27 — Pensions & Investment Age (ISSN 0273-5466) is published bi-weekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1987.

# Slow growth seen for '88

A majority of economists surveyed by *Pensions & Investment Age* expect slow to moderate economic growth to continue in 1988.

However, several expressed concern Congress could derail that growth with ill-advised trade legislation, which some thought could bring on a worldwide recession.

And one — Irwin Kellner, chief economist at Manufacturers Hanover Trust, New York — declared a recession already had begun, and predicted real economic growth next year would be zero in the first half and −1.9% in the second.

Mr. Kellner said he believed the recession already had begun because consumer spending, which is two-thirds of the gross national product, is lower than a year and a half ago, and the rise in GNP this year has been mainly on the production side. A lot of it is for inventory, he said.

In addition, the leading indicators were flat in September, down in October and down in November, he said, and fiscal policy had been tight, with the deficit dropping by one-third in the fiscal year ended Sept. 30. Interest rates are still higher than a year ago, and auto sales have declined, as have housing starts.

### Recession

While not as gloomy as Mr. Kellner, three other economists said there was a 50% chance or better of having a recession in 1988.

Thom Brown, chairman of the investment policy committee at Butcher & Singer Inc., Philadelphia, and Ken Safian, president of Safian Investment Research Inc., New York, both said there was a 60% chance of a recession in 1988, and Robert Dederick, executive vice president and chief economist at Northern Trust Co., Chicago, said the chance of a recession was 50%.

Key in Mr. Brown's expectation of a recession is the belief Congress will do "something stupid," such as enact protectionist trade legislation. Such legislation "would be nuts" he said, but added: "Never underestimate what a politician will do in an election year."

Mr. Safian also was concerned a continued weakening of the dollar might prompt protectionist trade legislation in the United States.

Those concerns were echoed by several of the economists interviewed.

John Rutledge, chairman of Claremont Economics Institute, Claremont, Calif., said there was a danger of a "trade meltdown" if the United States enacts restrictive trade legislation and other countries responded.

A related danger, he said, is a boycott by foreign investors, making financing of the budget deficit more difficult. "We have treated foreign investors abysmally," Mr. Rutledge said.

David Bostian, president of Bostian Research Associates, New York, who expects 3.6% growth in the first half of 1988 followed by 3.8% growth in the second, is also concerned about protectionism. "If the trade deficit doesn't improve, it could precipitate protectionist trade legislation, which could slow economic growth," he said.

### Economic growth

Despite the concerns, the majority of the economists expected slow to moderate growth in the economy, with most expecting stronger growth in the second half.

The most optimistic was David Levine, chief economist at Sanford C. Bernstein & Co., New York, who predicted a 6.7% GNP growth rate in the first half followed by a 4.3% growth rate in the second half.

Mr. Levine based his optimistic predictions on the fact "inventories have gotten to be very lean, relative to demand." Because of this, he expects an upswing in inventory building and capital spending. In addition, the economy will be helped significantly by an increase in foreign trade, which will offset any increase in interest rates, he predicted.

Mr. Bostian was optimistic because in recent years companies have been modernizing equipment and trying to lower their break-even points, and an increase in orders could result in market profitability improvements.

Lacy Hunt, chief economist at Carroll, McEntee & McGinley, Philadelphia, also predicted GNP would grow at a 3.6% annual rate in the first half of 1988, dropping slightly to a 3.2% rate in the second.

Mr. Hunt said the economy in 1988 would be export driven, and corporate spending will be buoyed by strength in exports and heavy industry, which will more than offset weakness from housing and consumer durables. Exports and capital spending account for 24% of GNP, he said, while housing and consumer durables account for only 15%.

### Inflation

Most of the economists expected inflation in the first half of the year to be 3.5% or more and to worsen in the second half. Eleven of the 16 interviewed expected inflation to increase to 4.5% or more in the second half.

Mickey Levy, senior vice president and chief economist at Fidelity Bank, Philadelphia, sees lower inflation — 3.5% — in the first half of 1988, rising to 5% in the second half. The low inflation in the first half is the result of lower oil prices, he said, while the acceleration in the second half is because of higher interest rates and stronger production.

Mr. Hunt also looks for higher inflation in the second half — 6% — because labor markets, which already are tightening, will continue to do so, and imports will also boost inflation. In addition, he expects a

*Continued on page 46*

## What the experts predict for 1988

| Name | GNP 1st half | GNP 2nd half | Inflation 1st half | Inflation 2nd half | 90 day T-bills rate July 1 | 90 day T-bills rate Dec. 31 | 30-year Treasuries July 1 | 30-year Treasuries Dec. 31 | Federal deficit fiscal '88 ($ billions) | Trade deficit '88 ($ billions) | Chance of recession in '88 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| David Bostian<br>Bostian Research Associates | 3.6% | 3.8% | 3.6% | 3.8% | 6 % | 6.4 % | 7.9 % | 7.5 % | 134 | 92 | 5% |
| Thom R. Brown<br>Butcher & Singer Inc. | 2.5 | 1.5 | 3.5 | 4.5 | NA | NA | 9 | 10 | 175 | Less than 100 | 60 |
| Robert A. Brusca<br>Nikko Securities Co. International | 2 | 2.5 | 3.2 | 4.7 | 5.7 | 6.5 | 8.25 | 9.75 | NA | 152 | 30 |
| Robert Chandross<br>Lloyds Bank in North America PLC | 1.5 | 1.6 | 4.2 | 4.7 | 6 | 6.5 | 8.75 | 9.25 | 160 | 170 | 20 |
| Robert Dederick<br>Executive vice president<br>Northern Trust Co. | 1 | 2.5 | 4 | 4 | 5.5 | 6.25 | 8.25 | 9 | 165 | 160 | 50 |
| Lacy Hunt<br>Chief economist<br>Carroll, McEntee & McGinley | 3.6 | 3.2 | 3.8 | 6 | 6.4 | 7 | 9.55 | 10 | 180.2 | 172.4 | 10 |
| Deborah Johnson/<br>Edward Yardeni<br>Prudential-Bache Securities | 2.7 | 2.9 | 3.5 | 4.5 | 5.3 | 4.8 | 8.5 | 8 | 175 | 100 | 10 |
| Irwin Kellner<br>Chief economist<br>Manufacturers Hanover Trust Co. | 0.0 | −1.9 | 4.6 | 5.7 | 5.5 | 5.1 | 8.5 | 8 | 170 | 155 | 100 |
| David Levine<br>Chief economist, Sanford C. Bernstein & Co. | 6.7 | 4.3 | 5 | 5.7 | 7.75 | 8.75 | 10.75 | 11.5 | 155 | 145 | 5 |
| Mickey Levy<br>Senior vice president<br>Fidelity Bank | 1.7 | 3.2 | 3.5 | 5 | 5.6 | 6.6 | 9 | 10 | 170 | 158 | 20 |
| David Littman<br>VP & Sr. economist<br>Manufacturers National | 1.8 | 2.65 | 5 | 5.7 | 6.75 | 7.25 | 8.9 | 10.5 | 180 | 155 | 30 |
| Richard Rippe<br>Sr. VP & economist<br>Dean Witter Reynolds | 1-1.5 | 2.5-3 | 4 | 4.6 | NA | NA | NA | NA | 157 | 158 | 20-25 |
| John Rutledge<br>Chairman<br>Claremont Economics Institute | 2.8 | 3.3 | 2.8 | 3.5 | 5 | 5.4 | 8.3 | 8.5 | 130 | 150 | 25 |
| Kenneth Safian<br>President, Safian Investment Research | 0.5 | 0.0 | 4 | 3.5 | 5.75 | 5.5 | 8.75 | 8 | 160 | 155 | 60 |
| Francis H. Schott<br>Chief economist<br>Equitable Life Assurance Society | 2 | 3 | 4.5 | 5.5 | 6.5 | 7 | 9.5 | 10 | 165 | 145 | 30 |
| Donald Straszheim<br>Chief economist<br>Merrill Lynch Pierce Fenner & Smith | −0.1 | 2.1 | 4.4 | NA | 5.75 | 6.3 | 8.75 | 9.45 | 170 | 124 | 33 |

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# Fiduciary duty in mergers eyed

**By Brad Rudin**

CHICAGO — Whether Duff & Phelps Inc. breached its fiduciary duty to an employee stockholder by failing to disclose merger negotiations will be decided early next year by a federal court jury.

This case, along with a related one for which a Supreme Court review is being sought, could shed light on when, during negotiations, a closely held corporation has a duty to disclose the talks to selling shareholders.

While a publicly held corporation may keep silent about a merger agreement until the price and structure of the deal is agreed upon, privately held companies must disclose the negotiations before price and structure are decided. The decision to sell the company as well as the status of those negotiations, however, must be made only to the person considering selling stock.

Whether the negotiations were material to an employee's decision to sell the stock is the question.

The Duff & Phelps' case suggests the officers of closely held corporations should proceed cautiously when they are in simultaneous negotiations with employees who are selling their stock and other corporations interested in buying the company.

"I don't think it takes very much common sense to say 'maybe we ought to be taking a look at this,' " said Richard C. Leng, a Chicago lawyer who is representing Donald J. Guy, the former Duff & Phelps employee.

Mr. Guy contends his decision to leave Duff & Phelps would have been influenced by information about merger negotiations, which — if successful — would have boosted the stock's value.

Under the stock purchase agreement, employees had to sell their shares back when they left.

Mr. Guy left Duff & Phelps in 1983, not knowing Chairman Claire Hansen was negotiating a merger agreement with Security Pacific National Bank, Los Angeles. That agreement fell through in 1985. Soon after, the company was sold to an employee stock ownership plan.

Mr. Guy's departure from Duff & Phelps was sparked by a dispute with Mr. Hansen over a commodities trading business, which Mr. Guy said he would not abandon. Mr. Hansen then terminated Mr. Guy's employment.

Mr. Guy received book value for the 200 Duff & Phelps shares he held. The difference between the book value and the price offered by Security Pacific should be the basis for determining the damages awarded to Mr. Guy, Mr. Leng said. Damages will be considered by a jury when the trial begins in May.

A federal district judge threw out Mr. Guy's suit in 1985, but withdrew that dismissal Oct. 23 because of a March 1987 appellate case — also involving a former Duff & Phelps employee — that held a closely held corporation has a fiduciary duty to disclose material information to investors from whom it purchases company stock. ■

## Corrections & clarifications

• Chuck Rawlins, assistant treasurer at Georgia Power Co., Atlanta, was identified incorrectly as chairman of the **National Corporate Cash Management Association** standards committee. Mr. Rawlins heads the standards committee task force on account analysis. Raymond L. Cushing, corporate cash manager at Nordson Corp., Amherst, Ohio, is chairman of the standards committee.

• The investment returns of **MTrust Dallas** were omitted inadvertently from the Nov. 16 PIPER listings. MTrust's growth fund was up 48.6% for the 12 months ended Sept. 30, ranking in the top 10% for the period. For three years, it was up 29.5% compounded annually, and for five years, it was up 25.5% compounded annually; both figures placed it in the top 25% for the periods.

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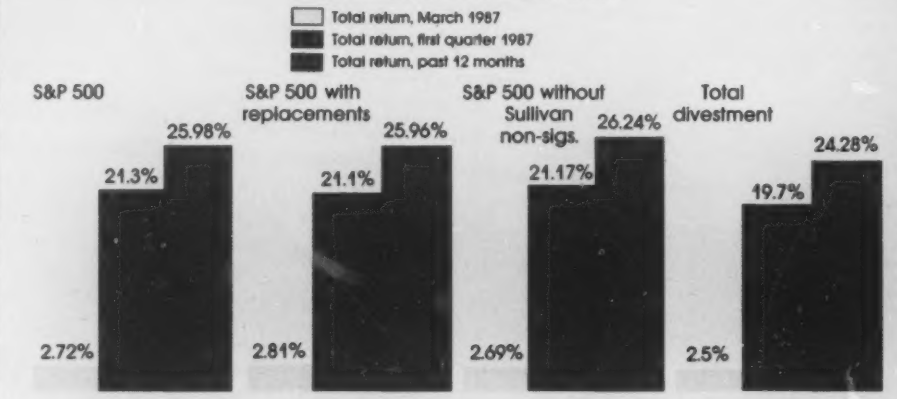
# Statistically speaking

The Statistically Speaking page offers an at-a-glance look at statistics for the latest quarter.

The Wilshire South Africa Free Index, Mercer-Meidinger bullet GIC data, First Chicago's MMI and the Russell 3000 returns will appear regularly.

Other data will be used as time and space allow.

## South Africa Free Index




Source: Wilshire Associates, Santa Monica, Calif.

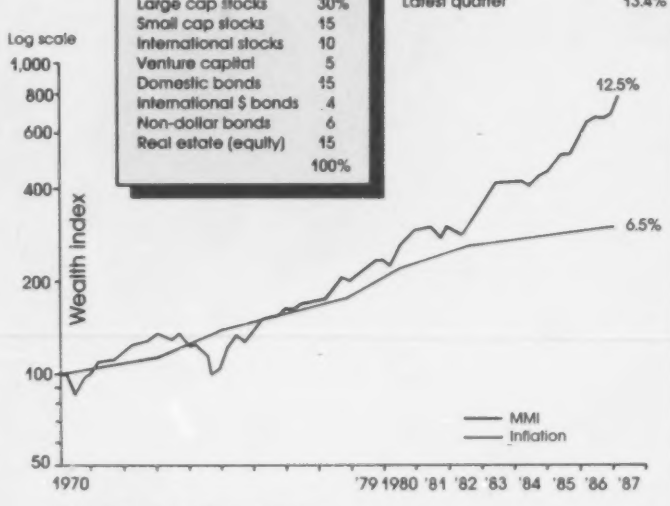
**S&P 500 with replacements:** replaces a South Africa-related company with next largest company in the industry. **S&P 500 without Sullivan non-signatories:** excludes 20 companies, no replacements. **Total divestment:** eliminates all companies with South Africa involvement, no replacements.

## Multiple Markets Index

The Multiple Markets Index is a benchmark for total portfolio returns. It is composed of eight asset classes used by retirement plan executives; it is calibrated to reflect the same degree of risk of the typical pension portfolio; it uses passive fixed policy weights; and it represents the individual asset classes by the broadest and most complete market return data available.

| | Weights |
|---|---|
| Large cap stocks | 30% |
| Small cap stocks | 15 |
| International stocks | 10 |
| Venture capital | 5 |
| Domestic bonds | 15 |
| International $ bonds | 4 |
| Non-dollar bonds | 6 |
| Real estate (equity) | 15 |
| | 100% |

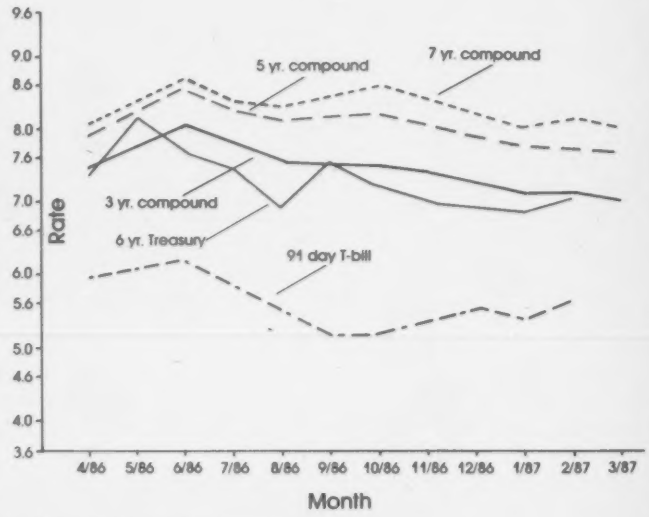
| | |
|---|---|
| Five-year annualized return | 22.2% |
| One-year return | 20.9% |
| Latest quarter | 13.4% |




12/31/69 = 100 Data through 3/31/87

Source: First Chicago Investment Advisors, Chicago

## William M. Mercer-Meidinger-Hansen Inc. summary of average bullet GIC data vs. market yields ($ millions)




Source: William M. Mercer-Meidinger Inc., Louisville, Ky.

## First quarter 1987 returns

| | Russell 3000 | Russell 1000 | Russell 1000 by market capitalization | | | | Russell 2000 |
|---|---|---|---|---|---|---|---|
| | | | Large | Medium/large | Medium | Medium/small | |
| Technology | 30.6% | 30.6% | 27.1% | 33.4% | 40.7% | 31.2% | 30.7% |
| Health care | 26.1 | 25.8 | 23.8 | 30.9 | 25.4 | 27.6 | 28.2 |
| Consumer discretionary | 24.5 | 24.9 | 24.7 | 26.5 | 24.4 | 22.4 | 21.9 |
| Consumer staples | 19.7 | 19.6 | 18.2 | 21.9 | 19 | 15 | 21.7 |
| Integrated oils | 25.4 | 25.4 | 25 | 33.1 | 15.6 | 23.5 | 13.7 |
| Other energy | 26.7 | 25.7 | — | 27.1 | 22.8 | 28.7 | 34.5 |
| Materials and processing | 28.4 | 28.6 | 34.8 | 24.7 | 29.9 | 28.3 | 27.6 |
| Producer durables | 19.6 | 19 | 2.2 | 20 | 23.4 | 19.3 | 23.5 |
| Auto and transportation | 22.8 | 23.3 | 32.6 | 22.4 | 16.3 | 20.2 | 16 |
| Financial services | 13.1 | 12.7 | 20.7 | 9.1 | 11.9 | 14.7 | 17.4 |
| Utilities | 3.4 | 3.2 | 2 | 3.7 | 3.9 | 6.1 | 12.5 |
| Total | 20.6 | 20.2 | 20.3 | 20.2 | 20 | 20.4 | 24.3 |

Source: Frank Russell Co., Tacoma, Wash.

# Statistically speaking

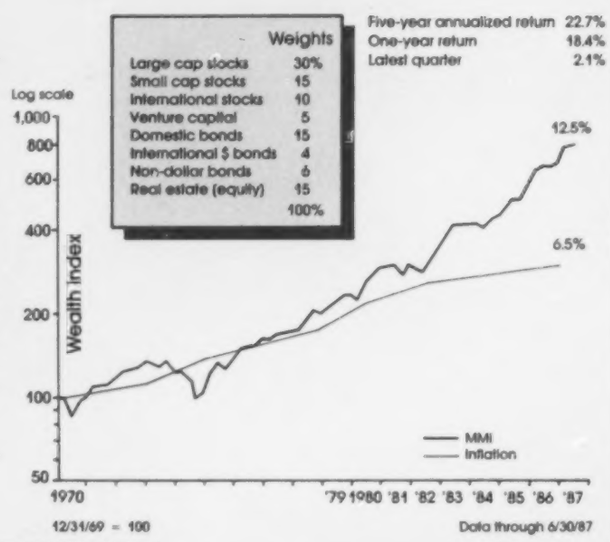
## South Africa Free Index

Source: Wilshire Associates, Santa Monica, Calif.

**S&P 500 with replacements:** replaces a South Africa-related company with next largest company in the industry. **S&P 500 without Sullivan non-signatories:** excludes 20 companies, no replacements. **Total divestment:** eliminates all companies with South Africa involvement, no replacements.

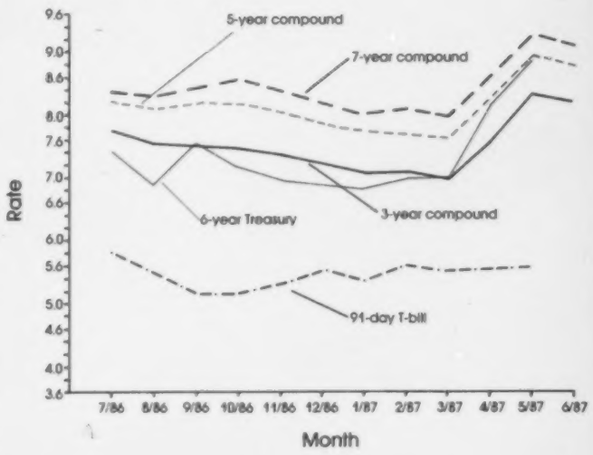
## Multiple Markets Index

The Multiple Markets Index is a benchmark for total portfolio returns. It is composed of eight asset classes used by retirement plan executives; it is calibrated to reflect the same degree of risk of the typical pension portfolio; it uses passive fixed policy weights; and it represents the individual asset classes by the broadest and most complete market return data available.




Source: First Chicago Investment Advisors, Chicago

## William M. Mercer-Meidinger-Hansen Inc. summary of average bullet GIC data vs. market yields ($ millions)




Source: William M. Mercer-Meidinger-Hansen Inc., Louisville, Ky.

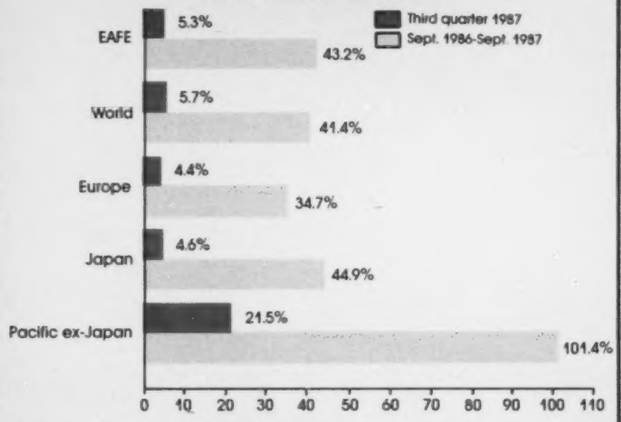
## Second quarter 1987 returns

| | Russell 3000® | Russell 1000® | Russell 1000® by market capitalization | | | | Russell 2000® |
|---|---|---|---|---|---|---|---|
| | | | Large | Medium/large | Medium | Medium/small | |
| Technology | 4.9% | 5.8% | 6.8% | 8.4% | −0.5% | 5.6 | −1.2% |
| Health care | 2.8 | 3.5 | 4.2 | 4.4 | 2 | −5.1 | −2.6 |
| Consumer discretionary | 5.5 | 6.3 | 4.9 | 7 | 9.3 | 2.6 | 0.1 |
| Consumer staples | 4 | 4.2 | 4.1 | 5.2 | 1.8 | 2.6 | −1.5 |
| Integrated oils | 9.8 | 9.8 | 10.7 | 2.2 | 9.9 | 2.7 | −1.2 |
| Other energy | 7.8 | 7.2 | -- | 8.2 | 5.5 | 8.6 | 11.5 |
| Materials and processing | 1.8 | 2 | 8.9 | 0.1 | −1.2 | 4.9 | 0.7 |
| Producer durables | 1.2 | 1.5 | −9.1 | 1.7 | 4 | 2.9 | −0.8 |
| Auto and transportation | 8.7 | 9.4 | 12.6 | 12.2 | 3.3 | 5.4 | −1.3 |
| Financial services | −2 | −1.6 | −1.4 | −1.3 | −1 | −3.2 | −6.7 |
| Utilities | −0.4 | −0.4 | 2.9 | −3.5 | −1.8 | −4.6 | 0.7 |
| Total | 3.4 | 3.8 | 6.1 | 3.6 | 2.1 | 0.9 | −0.7 |

Source: Frank Russell Co., Tacoma, Wash.

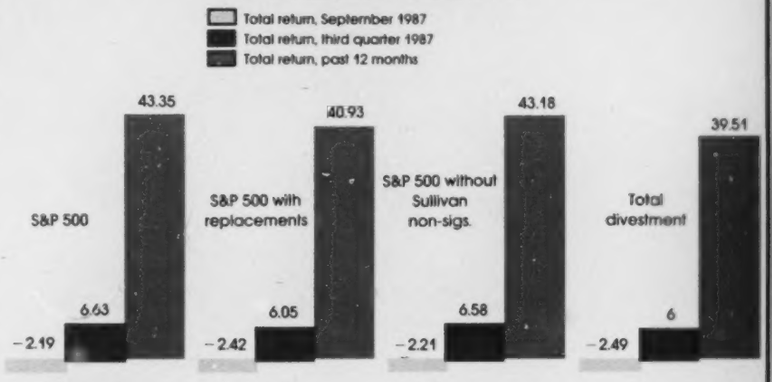
# Statistically speaking

## Morgan Stanley Capital International worldwide indexes




Source: Morgan Stanley Capital International
Indexes are in US dollar terms without dividends reinvested

## South Africa Free Index




Source: Wilshire Associates, Santa Monica, Calif.

**S&P 500 with replacements:** replaces a South Africa-related company with next largest company in the industry. **S&P 500 without Sullivan non-signatories:** excludes 20 companies, no replacements. **Total divestment:** eliminates all companies with South Africa involvement, no replacements.

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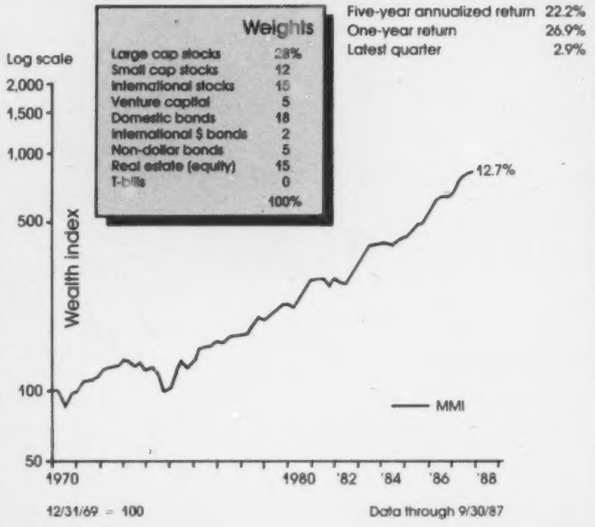
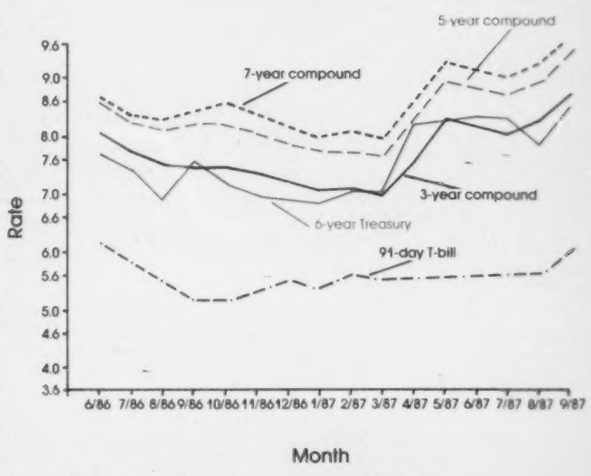



Source: First Chicago Investment Advisors, Chicago

## William M. Mercer-Meidinger-Hansen Inc. summary of average bullet GIC data vs. market yields ($ millions)




Source: William M. Mercer-Meidinger-Hansen Inc., Louisville, Ky.

## Third quarter 1987 returns

| | Russell 3000® | Russell 1000® | Russell 1000® by market capitalization | | | | Russell 2000® |
|---|---|---|---|---|---|---|---|
| | | | Large | Medium/large | Medium | Medium/small | |
| Technology | 6.7% | 7 % | 2.7% | 13.8% | 14.6% | 8.3 | 4.9% |
| Health-care | 5.1 | 5.4 | 6.1 | 6 | 0.7 | 2.6 | 2.7 |
| Consumer discretionary | 4 | 4 | 8.1 | 3.8 | 2.9 | 1.5 | 4.3 |
| Consumer staples | 9.8 | 10.1 | 17.3 | 1 | 7.6 | 6.1 | 1.8 |
| Integrated oils | -0.7 | -0.7 | -0.5 | -3.8 | 1.2 | 14.6 | 8.9 |
| Other energy | 0.9 | 1.5 | -- | 0.1 | 2.6 | 2.5 | -2.9 |
| Materials and processing | 11.6 | 12 | 9.9 | 9.3 | 15.7 | 12.2 | 9.3 |
| Producer durables | 12.2 | 13.5 | 15.7 | 10.3 | 18.1 | 11.5 | 3.6 |
| Auto and transportation | 5.2 | 5 | 0.8 | 10.1 | 2.9 | 4.4 | 7 |
| Financial services | 3.5 | 3.6 | 5.5 | 4.6 | 1.7 | 4.5 | 1.3 |
| Utilities | 6.1 | 6.3 | 14.5 | -0.9 | 1.2 | 0.7 | 0.8 |
| Total | 6.1 | 6.3 | 7.3 | 5.5 | 6.2 | 5.4 | 4.2 |

Source: Frank Russell Co., Tacoma, Wash.

## Managers ranked by tax-exempt assets in global accounts

| Firm | $ mils. |
|---|---|
| Templeton International | 2,700 |
| Eaton Vance Management | 1,440 |
| Fiduciary Trust Co. International* | 700 |
| BEA Associates | 586 |
| Warburg Investment Management International | 371 |
| BA Investment Management International | 321 |
| Fidelity International Investment Advisors | 300 |
| Capital Guardian Trust | 288 |
| Capital Research & Management | 246 |
| Beutel, Goodman International | 202 |
| Rowe Price-Fleming International | 200 |
| PCM International | 176 |
| State Street Bank and Trust | 158 |
| Lombard Odier Holdings (UK) | 143 |
| Schroder Capital Management International | 139 |
| ABD International Management | 132 |
| J.P. Morgan Investment Management | 125 |
| Martin Currie | 125 |
| N.M. Rothschild International Asset Management | 92 |
| American Express Asset Management | 82 |
| First Chicago Investment Advisors | 74 |
| IDS International | 71 |
| Hill Samuel Investment Advisers | 49 |
| Morgan Grenfell Investment Services | 49 |
| Citicorp Investment Management | 43 |
| Julius Baer Investment Management | 33 |
| Batterymarch Financial Management | 31 |
| Alliance Capital Management International | 23 |
| G.T. Capital Management | 23 |
| SBC Portfolio Management International | 13 |
| B.T. Investment Management | 10 |
| Ivory & Sime International | 9 |
| Scudder, Stevens & Clark | 7 |
| Capital Management International of Deutsche Bank | 3 |
| Arnhold & S. Bleichroeder International | 0 |
| Baillie Gifford Overseas | 0 |
| Baring International Investment | 0 |
| Bessemer Trust* | 0 |
| Brown Brothers Harriman | 0 |
| Centerre Trust | 0 |
| Chase Investors Management | 0 |
| Daiwa International Capital Management | 0 |
| Fidelity Management Trust | 0 |
| Grantham, Mayo, Van Otterloo | 0 |
| Kemper-Murray Johnstone International | 0 |
| Kleinwort Benson International Investment | 0 |
| Mellon-Pictet International Management | 0 |
| Nomura Capital Management | 0 |
| Oechsle International Advisors | 0 |
| Putnam Cos. | 0 |
| Wellington Management/TDP&L | 0 |
| Wells Fargo | 0 |
| Total | 8,964 |

*as of Jan. 1, 1987

## Managers ranked by tax-exempt assets in international and global accounts

| Firm | $ mils. |
|---|---|
| State Street Bank and Trust | 3,249 |
| J.P. Morgan Investment Management | 3,231 |
| Capital Guardian Trust | 2,877 |
| Morgan Grenfell Investment Services | 2,779 |
| Templeton International | 2,700 |
| Fidelity International Investment Advisors | 2,300 |
| First Chicago Investment Advisors | 2,297 |
| Grantham, Mayo, Van Otterloo | 2,246 |
| Rowe Price-Fleming International | 1,600 |
| Baring International Investment | 1,547 |
| Schroder Capital Management International | 1,509 |
| Eaton Vance Management | 1,440 |
| Batterymarch Financial Management | 1,180 |
| BA Investment Management International | 1,109 |
| N.M. Rothschild International Asset Management | 1,101 |
| Citicorp Investment Management | 965 |
| ABD International Management | 838 |
| Warburg Investment Management International | 834 |
| Fiduciary Trust Co. International* | 813 |
| Nomura Capital Management | 800 |
| PCM International | 724 |
| G.T. Capital Management | 688 |
| Mellon-Pictet International Management | 678 |
| Wells Fargo | 647 |
| Scudder, Stevens & Clark | 615 |
| BEA Associates | 586 |
| Daiwa International Capital Management | 563 |
| Oechsle International Advisors | 492 |
| IDS International | 474 |
| Arnhold & S. Bleichroeder International | 430 |
| American Express Asset Management | 397 |
| Alliance Capital Management International | 378 |
| Hill Samuel Investment Advisers | 332 |
| Kemper-Murray Johnstone International | 325 |
| Capital Research & Management | 322 |
| Chase Investors Management | 321 |
| Brown Brothers Harriman | 298 |
| Putnam Cos. | 274 |
| Martin Currie | 270 |
| B.T. Investment Management | 251 |
| Bessemer Trust* | 240 |
| Julius Baer Investment Management | 239 |
| Capital Management International of Deutsche Bank | 231 |
| Beutel, Goodman International | 213 |
| Kleinwort Benson International Investment | 187 |
| Lombard Odier Holdings (UK) | 180 |
| Centerre Trust | 178 |
| Fidelity Management Trust | 174 |
| Wellington Management/TDP&L | 166 |
| Baillie Gifford Overseas | 165 |
| Ivory & Sime International | 148 |
| SBC Portfolio Management International | 144 |
| Total | 46,745 |

*as of Jan. 1, 1987

## Managers ranked by tax-exempt assets in international accounts

| Firm | $ mils. |
|---|---|
| J.P. Morgan Investment Management | 3,106 |
| State Street Bank and Trust | 3,091 |
| Morgan Grenfell Investment Services | 2,730 |
| Capital Guardian Trust | 2,589 |
| Grantham, Mayo, Van Otterloo | 2,246 |
| First Chicago Investment Advisors | 2,223 |
| Fidelity International Investment Advisors | 2,000 |
| Baring International Investment | 1,547 |
| Rowe Price-Fleming International | 1,400 |
| Schroder Capital Management International | 1,370 |
| Batterymarch Financial Management | [illegible] |
| N.M. Rothschild International Asset Management | 1,009 |
| Citicorp Investment Management | 922 |
| Nomura Capital Management | 800 |
| BA Investment Management International | 788 |
| ABD International Management | 706 |
| Mellon-Pictet International Management | 678 |
| G.T. Capital Management | 665 |
| Wells Fargo | 647 |
| Scudder, Stevens & Clark | 608 |
| Daiwa International Capital Management | 563 |
| PCM International | 548 |
| Oechsle International Advisors | 492 |
| Warburg Investment Management International | 463 |
| Arnhold & S. Bleichroeder International | 430 |
| IDS International | 403 |
| Alliance Capital Management International | 355 |
| Kemper-Murray Johnstone International | 325 |
| Chase Investors Management | 321 |
| American Express Asset Management | 315 |
| Brown Brothers Harriman | 298 |
| Hill Samuel Investment Advisers | 283 |
| Putnam Cos. | 274 |
| B.T. Investment Management | 241 |
| Bessemer Trust* | 240 |
| Capital Management International of Deutsche Bank | 228 |
| Julius Baer Investment Management | 206 |
| Kleinwort Benson International Investment | 187 |
| Centerre Trust | 178 |
| Fidelity Management Trust | 174 |
| Wellington Management/TDP&L | 166 |
| Baillie Gifford Overseas | 165 |
| Martin Currie | 145 |
| Ivory & Sime International | 139 |
| SBC Portfolio Management International | 131 |
| Fiduciary Trust Co. International* | 113 |
| Lombard Odier Holdings (UK) | 37 |
| BEA Associates | 0 |
| Capital Research & Management | 0 |
| Eaton Vance Management | 0 |
| Templeton International | 0 |
| Total | 37,694 |

*as of Jan. 1, 1987

# Top index fund managers

($ millions as of 5/30/87)

| | Total indexed | Domestic equity | Domestic fixed | International |
|---|---|---|---|---|
| Wells Fargo | 62,353 | 37,661 | 10,916 | 606 |
| Bankers Trust | 28,500 | 24,700 | 3,500 | 300 |
| Mellon Capital | 20,000 | 17,000 | 3,000 | 0 |
| State Street Bank | 15,180 | 9,600 | 1,720 | 3,860 |
| American Nat'l Bank* | 9,550 | 8,250 | 1,200 | 100 |
| Manufacturers Hanover Trust | 6,706 | 106 | 6,600 | 0 |
| Chase Investors | 6,418 | 5,500 | 501 | 0 |
| Dimensional Fund Advisors | 5,153 | 4,076 | 964 | 113 |
| Mellon Bond Associates | 4,200 | 0 | 4,200 | 0 |
| Alliance Capital | 4,110 | 3,800 | 60 | 250 |
| Manufacturers Nat'l-Detroit | 3,409 | 3,100 | 9 | 300 |
| Wilshire Asset Management | 2,800 | 2,800 | 0 | 0 |
| Northern Trust | 2,688 | 1,326 | 1,336 | 25 |
| T. Rowe Price | 2,249 | 249 | 1,950 | 0 |
| The Boston Co. | 2,046 | 1,574 | 340 | 132 |
| Prudential Asset | 1,910 | 895 | 623 | 392 |
| Lehman Management | 1,900 | 0 | 1,900 | 0 |
| Putnam Advisory | 1,600 | 0 | 1,600 | 0 |
| Lincoln Capital | 1,500 | 0 | 1,500 | 0 |
| The Vanguard Group | 1,186 | 1,160 | 26 | 0 |
| Harris Trust | 800 | 500 | 300 | 0 |
| Citicorp | 660 | 660 | 0 | 0 |
| Axe Core Investors | 500 | 375 | 0 | 125 |
| RepublicBank Dallas | 475 | 475 | 0 | 0 |
| ASB Capital | 467 | 467 | 0 | 0 |
| Tenneco Financial | 457 | 457 | 0 | 0 |
| Aetna Life & Casualty | 450 | 250 | 200 | 0 |
| Centerre Trust | 316 | 316 | 0 | 0 |
| Western Asset | 300 | 0 | 300 | 0 |
| Fiduciary Trust | 270 | 0 | 0 | 270 |
| BA Investment | 267 | 158 | 109 | 0 |
| Metropolitan Life** | 220 | 220 | 0 | 0 |
| Travelers Investment | 218 | 166 | 0 | 52 |
| First Wisconsin Trust | 205 | 30 | 175 | 0 |
| First Interstate/California*** | 203 | 162 | 41 | 0 |
| MacKay-Shields Financial | 180 | 25 | 155 | 0 |
| Nat'l Bank of Detroit | 172 | 172 | 0 | 0 |
| Favia Hill | 101 | 0 | 101 | 0 |
| The Griffin Group | 95 | 0 | 95 | 0 |
| County Investment | 75 | 0 | 0 | 75 |
| Irving Trust | 70 | 70 | 0 | 0 |
| SeaFirst Bank | 70 | 0 | 70 | 0 |
| Total | 190,029 | 126,300 | 43,491 | 6,600 |

*As of 3/1/87
**$124 million in short-term timed index fund
***As of 11/30/86

# Portfolio insurance assets hedged ($ mils.)

| Firm | As of 3/31 | As of 9/30 |
|---|---|---|
| Advanced Investment Mgmt. | 430 | 580 |
| Aegis Capital Mgmt. | 40 | 55 |
| Aetna Life & Casualty | 16,253 | 17,000 |
| American Nat'l Bank of Chicago | 100 | 100 |
| BEA Associates | 728 | 1,200 |
| Bankers Trust-Investment Mgmt. | 3,500 | 4,000 |
| The Boston Co. | 300 | 300 |
| Centerre Trust | 700 | 620 |
| Drexel Burnham Lambert | NA | 2,000 |
| Leland O'Brien Rubinstein | 22,000[1] | 22,000[1] |
| Lotsoff Capital Mgmt. | 75 | 280 |
| Mellon Bond Associates | 500 | NA |
| Mellon Capital Mgmt. | NA | 1,000 |
| J.P. Morgan Investment Mgmt. | 4,217[2] | 7,000 |
| Morgan Stanley | 2,000[2] | NA |
| Northern Trust | 150 | 150 |
| Oppenheimer Capital | 1,000 | 1,500 |
| Skye Investment Advisors | 765 | 813 |
| The Travelers | 125 | 150 |
| Webster Capital Mgmt. | 0 | 80 |
| Wells Fargo Investment Advisors | 10,700 | 9,200 |
| Westridge Capital Mgmt. | 35 | 40 |
| TOTAL | 63,618 | 68,068 |

[1] *Pensions & Investment Age* estimate
[2] As of Jan. 1

# Japanese assets under management by non-Japanese managers

| Manager | Japanese relationship | Discretionary or advisory assets |
|---|---|---|
| ABD Int'l Mgmt. | direct | 150 |
| Alliance Capital Mgmt. | direct | 232 |
| Australia/New Zealand Banking | Daiwa | 94 |
| Bankers Trust | Jardine Fleming Bank | 2,650 |
| Banque Indosuez | direct | 100 |
| | Nikko | NA* |
| | Nomura | 8 |
| Banque Nationale de Paris | Daiwa | NA* |
| Barclays Bank | direct | 560 |
| Baring Int'l Investment | direct | 145 |
| | Daichi | 50 |
| | Daiwa | 130 |
| | Nikko | 100 |
| Batterymarch Financial Mgmt. | Taiyo | 250 |
| | Yamaichi | 60 |
| Capital Guardian Int'l | Nomura | 175 |
| Capital Mgmt. Int'l | Nomura | 35 |
| Chase Investors Mgmt. | direct | 40 |
| | Daiwa | 80 |
| | Yamaichi | 147 |
| Chemical Bank | direct | 1,500 |
| Citicorp Investment Mgmt. | NA | 419 |
| CIGNA Asset Advisers | direct | 525 |
| County Investment Mgmt. | direct | 160 |
| | Daiwa | NA |
| Credit Commercial de France | Nikko | 50 |
| Credit Suisse Trust | Mitsui Trust | 762 |
| Dimensional Fund Advisors | Nomura | 75 |
| Dreyfus | Daiwa | 155 |
| | Daiwa | NA* |
| Fraser Green | Nikko | 10 |
| G.T. Capital Mgmt. | direct | 350 |
| | Nikko | NA* |
| | Nomura, others | 250 |
| Hill Samuel Group | direct | 520 |
| IDS Equity/Fixed Income Advisors | Daiwa | NA* |
| Ivory & Sime Int'l | Nikko | 30 |
| | Sumitomo Life | 100 |
| | Sumitomo Trust | 40 |
| | Yamaichi | 60 |
| Jardine Fleming Investment Mgmt. | Yasuda Trust | 500 |
| Korean Trust | Yamaichi | 45 |
| M.&G. Investment Mgmt. | Yamaichi | 89 |
| Manufacturers Hanover Investment | direct | 399 |
| | NA | 126 |
| Mercury Asset Mgmt. | direct | 378 |
| | New Japan | 100 |
| | Nikko | 110 |
| | Yamaichi | 90 |
| Merrill Lynch Asset Mgmt. | direct | 500 |
| Merrill Lynch | Nomura | NA* |
| MIM Britannia | direct | 500 |
| | Daiwa | NA* |
| | Yamaichi | NA* |
| J.P. Morgan | direct | 1,000 |
| Morgan Grenfell Asset Mgmt. | NA | 750 |
| Murray Johnstone | Yamaichi | 280 |
| Paribas Asset Mgmt. | direct | 400 |
| Prudential Asset Mgmt. | Nikko | 100 |
| Prudential Portfolio Managers (U.K.) | Nomura | 190 |
| Putnam | Yamaichi | 28 |
| Robeco | Nikko | NA* |
| Ross and Roll Asset Mgmt.[1] | Daiwa | 89 |
| N.M. Rothschild Asset Mgmt. | Nomura | NA* |
| Royal Trust | Nikko | 25 |
| Schroder Capital Mgmt. Int'l | NA | NA |
| Scudder Stevens & Clark | Nikko | NA* |
| | Taiyo | NA* |
| Societe General | Yamaichi | NA* |
| Union Bank of Switzerland | direct | 570 |
| Wardley Investment Services Int'l | direct | 167 |
| | Nikko | 20 |
| Wellington Mgmt. | Nomura | 25 |
| | Yamaichi | 50 |
| Wells Fargo Investment Advisors | Nikko | 300 |
| TOTAL | | 16,843 |

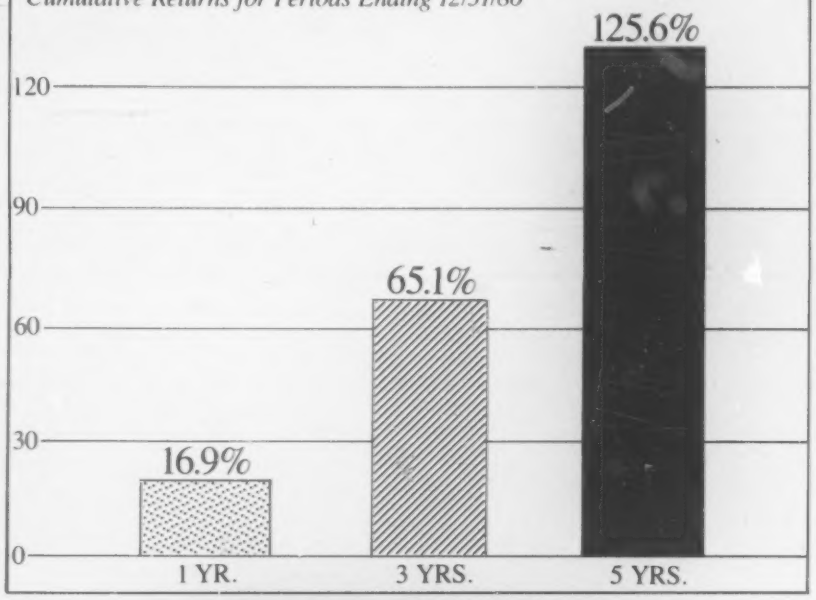
NA* the manager runs a portion of a multimanager fund; breakout by manager is not available
[1] Ross and Roll provides software for investment program; management is by Daiwa International Capital Mgmt.
Source: *Pensions & Investment Age*

# Financial Register
# Financial Register
# Financial Register

Coming: April 15, 1988
Advertising Closing: March 15, 1988
For more information regarding advertising in The Financial Register, contact Dick Weissbrod at (212) 210-0789.



*General American's Publicly Traded Bond Fund*
*Cumulative Returns for Periods Ending 12/31/86*




# QUALITY PERFORMANCE

**Over the five-year period ending on December 31, 1986, our Publicly Traded Bond Fund outperformed more than 70% of all the fixed income funds of banks and insurance companies included in the P.I.P.E.R. universe.**

Over the same time period, the Fund also produced results substantially in excess of Shearson-Lehman Government/Corporate Intermediate Term Bond Index.

This Fund has achieved remarkable performance while, at the same time, utilizing sound, conservative management techniques.

**Fund features**

- High Quality — Over 95% of the portfolio rated A or better.
- Intermediate Term — Avoids the fluctuations normally associated with long-term bonds.
- Duration Management — Designed to dampen downside volatility resulting from increasing interest rates.
- Complete Liquidity — Fund valued and available for transfer daily.

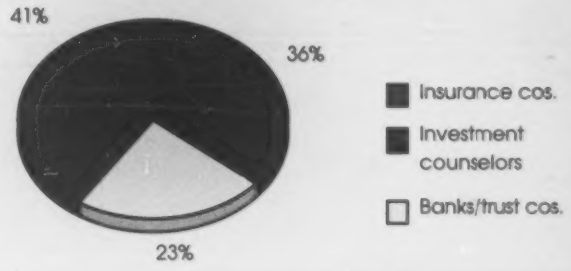
If your objective is the same as ours — outstanding performance from a quality investment — let's talk. **Call Ron Drury, Sales & Marketing Vice President-Group Pensions, at (314) 444-0778.**

*The Investor's Choice*

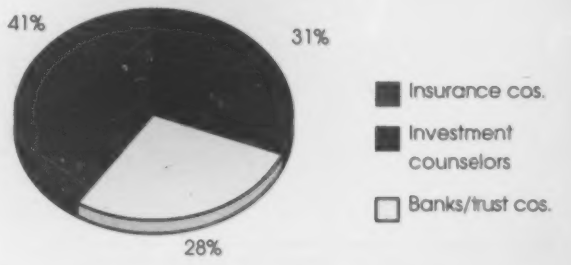
General American

St. Louis, Missouri 63101


## Who manages the money?
(the top 100)




## Who manages the money?
(the top 200)




## Profile statistics at a glance

| | |
|---|---|
| **Total managers profiled** | **984** |
| Banks, trust cos., subsidiaries | 215 |
| Insurance cos., subsidiaries | 69 |
| Investment counselors | 646 |
| Canadian managers* | 54 |
| **Total portfolio managers employed** | **7,423** |
| **Total security analysts employed** | **4,979** |
| **Stocks watched closely (average)** | |
| By banks | 287 |
| By insurance companies | 239 |
| By investment counselors | 204 |
| **Stocks watched generally (average)** | |
| By banks | 621 |
| By insurance companies | 1,188 |
| By investment counselors | 933 |
| **Percentage of in-house research (average)** | |
| By banks | 49 |
| By insurance companies | 59 |
| By investment counselors | 63 |
| **No. of managers using options** | **259** |
| **No. of managers using stock-index futures** | **126** |
| **No. of managers using fixed-income futures** | **122** |
| **Total assets managed ($ millions)** | **2,685,361** |
| Top 200 | 2,023,927 |
| Top 100 | 1,788,610 |
| **Tax-exempt assets managed ($ millions)** | **1,516,126** |
| Top 200 | 1,272,842 |
| Top 100 | 1,036,521 |
| **Tax-exempt assets managed ($ millions)** | |
| Banks, trust cos. and subsidiaries | 574,132 |
| Insurance cos. and subsidiaries | 416,258 |
| Investment counselors | 525,736 |
| **Real estate assets managed ($ millions)** | **74,328** |
| Equity real estate | 54,603 |
| Mortgages | 14,681 |
| **Mortgage-backed securities** | **36,840** |
| **International assets managed $ millions)** | **59,899** |
| Equity | 43,589 |
| Bonds | 14,255 |
| Cash | 2,055 |
| **Assets invested in GICs ($ millions)** | **101,861** |
| **Assets invested in 401(k)/457 plans ($ millions)** | **62,524** |

* All other statistics exclude Canadian managers

**25 largest investment counseling firms* ranked by tax-exempt assets**

| Managers | $ millions |
|---|---|
| Miller, Anderson and Sherrerd | 11,500 |
| Lehman Management | 11,469 |
| Scudder, Stevens & Clark | 11,300 |
| Delaware Investment Advisers | 11,103 |
| Boston Co. | 10,355 |
| INVESCO Capital Management | 9,991 |
| Oppenheimer Capital | 9,865 |
| Fayez Sarofim | 9,222 |
| Fischer, Francis, Trees & Watts | 9,100 |
| Wellington Management | 9,076 |
| T. Rowe Price Associates | 9,051 |
| Morgan Stanley Asset Management | 8,752 |
| Criterion Group | 8,198 |
| RCM Capital Management | 8,025 |
| Batterymarch Financial | 7,771 |
| Sanford C. Bernstein | 7,300 |
| Lazard Freres | 6,910 |
| Brown Brothers Harriman | 6,572 |
| BEA Associates | 6,193 |
| Lincoln Capital Management | 5,996 |
| Capital Supervisors | 5,786 |
| Neuberger and Berman | 5,538 |
| Jamison, Eaton & Wood | 5,053 |
| National Investment Services | 4,828 |
| Barrow, Hanley, Mewhinney & Strauss | 4,777 |
| **Total** | **203,731** |

*Excludes bank and insurance company subsidiaries

**25 largest banks and trust companies* ranked by tax-exempt assets**

| Managers | $ millions |
|---|---|
| Wells Fargo | 53,905 |
| J.P. Morgan Investment Management | 48,173 |
| Bankers Trust-Investment Management Group | 46,900 |
| Mellon Bank | 35,899 |
| State Street Bank and Trust | 23,572 |
| Citicorp Investment Management | 18,608 |
| Manufacturers Hanover Investment | 17,713 |
| The Capital Group | 17,508 |
| Chase Investors Management | 14,579 |
| Northern Trust | 12,976 |
| FMR | 12,243 |
| Fiduciary Trust | 11,445 |
| Trust Co. of the West | 10,173 |
| American National Bank & Trust, Chicago | 10,100 |
| First Chicago Investment Advisors | 9,013 |
| Harris Trust & Savings Bank | 8,463 |
| First Interstate Bancorp | 8,395 |
| Chemical New York | 7,068 |
| PNC Financial | 6,490 |
| First Bank System | 6,051 |
| AmeriTrust | 5,965 |
| RepublicBank Dallas | 5,719 |
| Boatmen's National Bank | 4,790 |
| Security Pacific | 4,674 |
| Bank of Boston | 4,665 |
| **Total** | **405,087** |

*Includes subsidiaries' assets

**25 largest insurance companies* ranked by tax-exempt assets**

| Managers | $ millions |
|---|---|
| Prudential Insurance | 76,246 |
| Equitable Life Assurance | 62,770 |
| Metropolitan Life Insurance | 51,532 |
| Aetna Life & Casualty | 38,879 |
| The New England | 26,113 |
| Travelers Cos. | 22,369 |
| CIGNA | 20,795 |
| John Hancock Financial Services | 17,148 |
| Pacific Mutual Life Insurance | 16,242 |
| New York Life Insurance | 14,948 |
| The Principal | 12,260 |
| Mass Mutual Life Insurance | 8,100 |
| MONY Financial Services | 6,703 |
| Mutual Benefit Life | 5,878 |
| Lincoln National | 5,734 |
| Liberty Mutual Insurance (Stein Roe & Farnham) | 5,300 |
| Marsh & McLennan (Putnam Cos.) | 5,296 |
| Transamerica Investment Services | 4,677 |
| Provident National Assurance | 3,949 |
| Kemper Financial Services | 3,591 |
| UNUM Life Insurance | 3,440 |
| Nationwide Insurance Group | 3,309 |
| Continental Assurance | 3,279 |
| Mutual of America Life Insurance | 3,156 |
| Massachusetts Financial Sevices | 3,058 |
| **Total** | **424,772** |

* Includes subsidiaries' assets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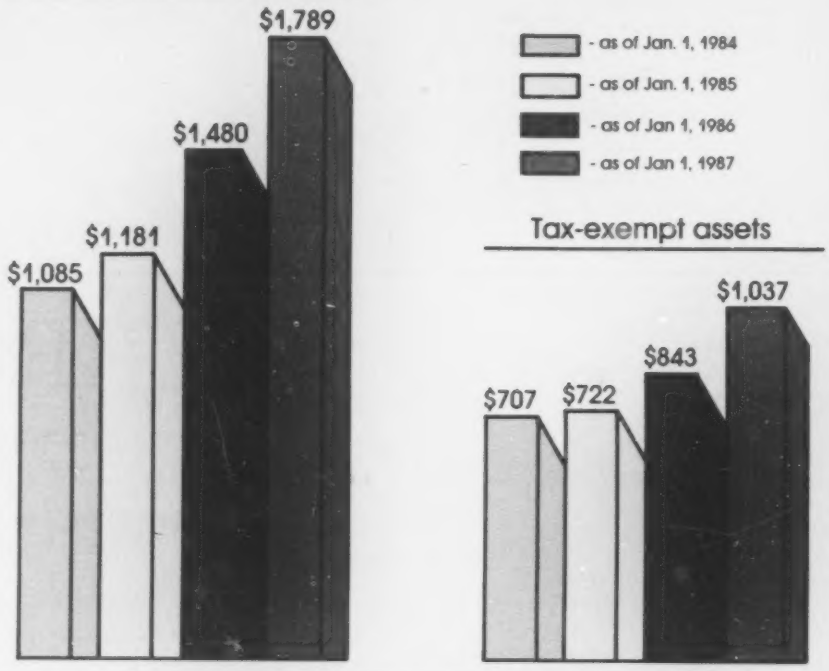
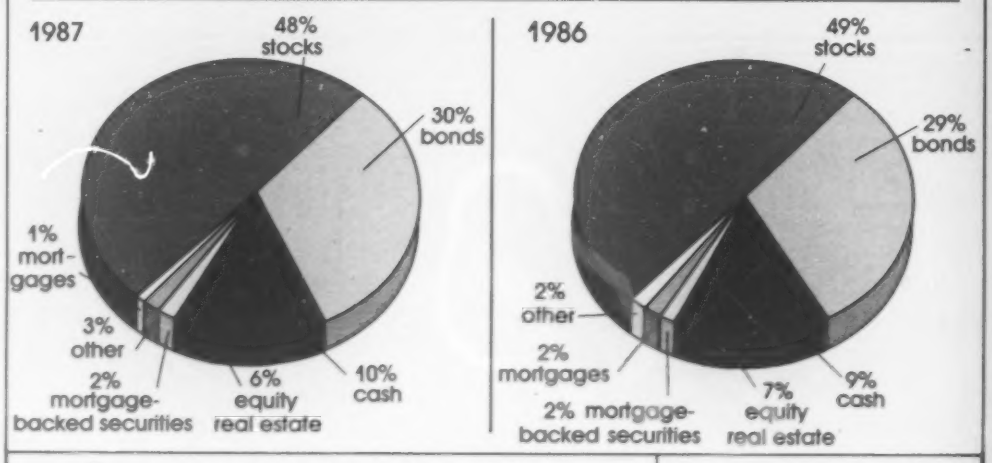
## Growth in assets of Top 100 managers
($ billions)




## Top 200 money managers' average asset mix



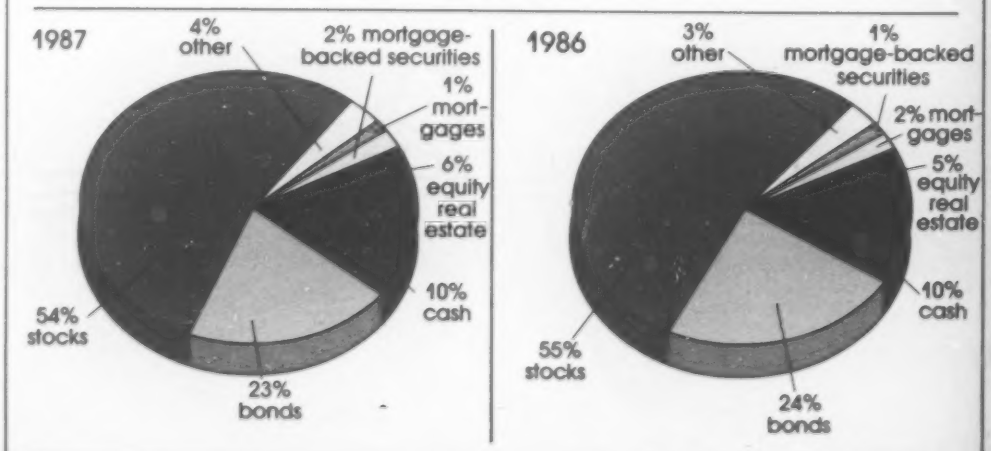

## Tax-exempt asset mix (by adviser)

| | Banks | Insurance companies | Investment counselors |
|---|---|---|---|
| Stocks | 45% | 52% | 57% |
| Bonds | 34 | 22 | 20 |
| Cash | 11 | 11 | 10 |
| Equity real estate | 4 | 7 | 6 |
| Mortgages | 1 | 3 | 1 |
| Mtg.-backed securities | 2 | 1 | 2 |
| Other | 3 | 4 | 4 |

## Canadian asset mix

| | |
|---|---|
| Canadian equities | 36% |
| Bonds | 36 |
| Cash | 8 |
| Equity real estate | 4 |
| Mortgages | 3 |
| U.S. equities | 8 |
| Other | 5 |

## Overall asset mix



# Top 100 advisers by total assets ($ mils.)

| | | | | | |
|---|---|---|---|---|---|
| 1. Metropolitan Life | 81,581 | 35. Boston Co. | 16,609 | 69. Centerre Trust | 9,632 |
| 2. Aetna Life | 60,226 | 36. Lehman Mgmt. | 16,077 | 70. Templeton International | 9,600 |
| 3. Fidelity Mgmt. | 58,000 | 37. Capital Research & Mgmt. | 15,614 | 71. Batterymarch Financial | 9,234 |
| 4. Prudential Asset Mgmt. | 54,106 | 38. JMB Institutional Realty | 15,300 | 72. Connecticut Mutual Life | 9,142 |
| 5. Wells Fargo Investment | 53,571 | 39. Mellon Capital Mgmt. | 15,000 | 73. First Chicago Investment Advisors | 9,013 |
| 6. Travelers Cos. | 51,899 | 40. Mellon Bond Associates | 14,855 | 74. National Bank of Detroit | 9,000 |
| 7. J.P. Morgan | 49,703 | 41. Massachusetts Financial | 14,669 | 75. RCM Capital Mgmt. | 8,991 |
| 8. Bankers Trust-Investment | 48,200 | 42. Capital Guardian Trust | 14,483 | 76. Irving Trust | 8,600 |
| 9. CIGNA Asset Advisers | 44,100 | 43. Fiduciary Trust | 14,013 | 77. Lord, Abbett | 8,596 |
| 10. Kemper Financial Services | 39,346 | 44. U.S. Trust Co. N.Y. | 13,561 | 78. RepublicBank Dallas | 8,544 |
| 11. John Hancock Financial | 36,884 | 45. The New England | 13,504 | 79. Sanford C. Bernstein | 8,500 |
| 12. Scudder, Stevens & Clark | 36,079 | 46. Harris Trust & Savings Bank | 13,117 | 80. AIM Mgmt. | 8,268 |
| 13. Putnam Cos. | 32,451 | 47. State Street Research | 12,991 | 81. First Wachovia | 8,000 |
| 14. Alliance Capital Mgmt. | 31,139 | 48. Criterion Group | 12,704 | 82. Lazard Freres | 7,996 |
| 15. Equitable Real Estate | 29,355 | 49. Daiwa International Capital | 12,500 | 83. Manufacturers National Bank | 7,881 |
| 16. Equitable Capital Mgmt. | 29,069 | 50. Bernstein-Macaulay | 12,375 | 84. Boatmen's National Bank | 7,464 |
| 17. New York Life | 29,035 | 51. Pacific Investment Mgmt. | 12,349 | 85. NCNB | 7,248 |
| 18. Wellington Mgmt. | 28,976 | 52. Bank of New York | 12,287 | 86. Texas Commerce Bank | 7,198 |
| 19. Citicorp Investment | 26,600 | 53. County Investment Mgmt. | 12,081 | 87. J&W Seligman | 7,102 |
| 20. State Street Bank | 26,473 | 54. Brown Brothers Harriman | 11,657 | 88. AIG Global | 7,000 |
| 21. Vanguard Group | 25,000 | 55. Neuberger and Berman | 11,547 | 89. UNUM Life | 6,951 |
| 22. Northern Trust | 20,726 | 56. Miller, Anderson, Sherrerd | 11,500 | 90. National City Bank | 6,900 |
| 23. MHIC | 20,655 | 57. Delaware Investment Advisers | 11,400 | 91. Bank One, Indianapolis | 6,871 |
| 24. T. Rowe Price | 20,200 | 58. AmeriTrust | 11,177 | 92. Standish, Ayer & Wood | 6,859 |
| 25. Loomis, Sayles | 20,168 | 59. American National, Chicago | 11,025 | 93. Copley Real Estate Advisors | 6,800 |
| 26. Jennison Capital Associates | 20,000 | 60. Stein Roe & Farnham | 10,800 | 94. Shearson Asset Mgmt. | 6,737 |
| 27. Smith Breeden | 20,000 | 61. Trust Co. of the West | 10,735 | 95. BEA Associates | 6,485 |
| 28. MONY | 18,100 | 62. BA Investment Mgmt. | 10,690 | 96. Nationwide Insurance | 6,443 |
| 29. Mass Mutual Life | 18,000 | 63. Fayez Sarofim | 10,688 | 97. Fidelity Bank | 6,232 |
| 30. Mitchell Hutchins | 17,932 | 64. Transamerica Investment | 10,406 | 98. Continental Assurance | 6,154 |
| 31. Wilmington Trust Co. | 17,849 | 65. Morgan Stanley Asset Mgmt. | 10,281 | 99. First Fidelity Bank | 6,100 |
| 32. Chase Investors | 17,300 | 66. Oppenheimer Capital | 10,241 | 100. Interfirst Investment | 6,078 |
| 33. American Capital Mgmt. | 17,047 | 67. INVESCO Capital Mgmt. | 10,091 | | |
| 34. The Principal | 16,994 | 68. Fischer, Francis, Trees & Watts | 9,900 | **Total** | **1,788,610** |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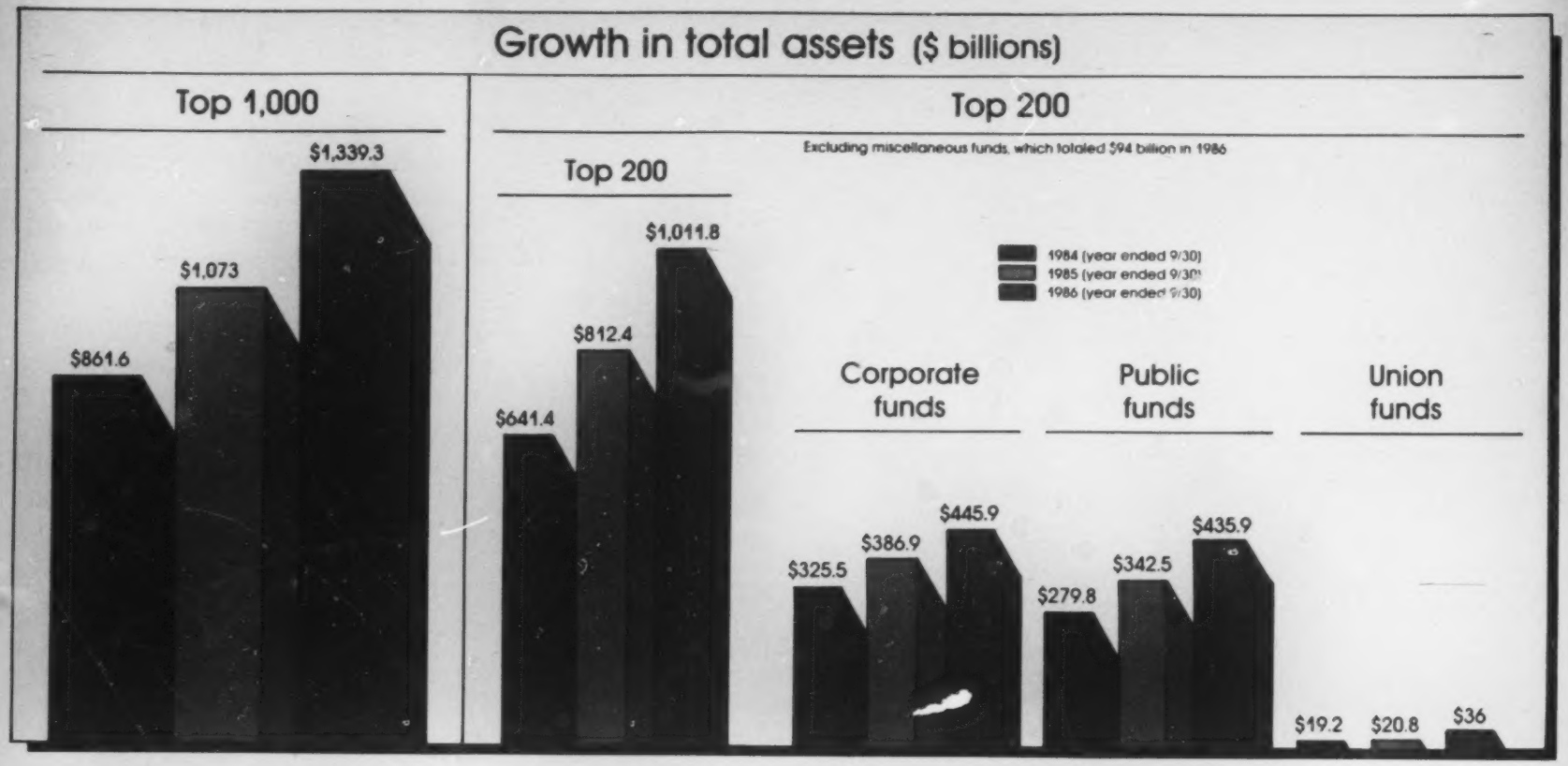


### Largest union funds
($ millions)

| Fund | Assets |
|---|---|
| Teamsters Western Conference | 7,571 |
| Teamsters Central States | 7,070 |
| UMWA Health & Retirement Funds | 4,223 |
| Boilermakers-Blacksmiths | 1,984 |
| Bakery & Confectionery Workers | 1,600 |
| Hospital/Health Care Employees | 1,600 |
| International Operating Engineers | 1,515 |
| Teamsters New England | 1,265 |
| IAM National Pension Fund | 1,198 |
| S. Calif. Food/Commercial Workers | 1,181 |
| **Total** | **29,207** |

### Largest miscellaneous funds
($ millions)

| Fund | Assets |
|---|---|
| TIAA-CREF | 52,300 |
| University of California | 8,378 |
| United Nations | 5,884 |
| Illinois Universities | 2,483 |
| United Methodist Church | 2,416 |
| World Bank | 2,200 |
| Tennessee Valley Authority | 2,028 |
| Southern Baptist Convention | 1,767 |
| Presbyterian Church U.S.A. | 1,750 |
| National Rural Electric Co-op | 1,550 |
| Episcopal Church Pension Fund | 1,250 |
| **Total** | **82,006** |

## Profile statistics at a glance

($ billions)

| | 1986 | 1985 |
|---|---|---|
| Top 1,000 assets | 1,339.3 | 1,073 |
| Top 200 assets | 1,011.8 | 812.4 |
| Top 100 assets | 845.7 | 675.6 |
| Top 50 assets | 660.1 | 523.7 |
| Top 25 assets | 479.3 | 377.6 |
| Top 200 defined benefit | 831.1 | 648.5 |
| Top 200 defined contribution | 92.2 | 75.9 |
| Top 200 profit-sharing | 17.4 | 12.8 |
| Top 200 thrift/401(k) | 58.1 | 48.1 |

### Top 200 fund statistics
($ billions)

| | 1986 | 1985 |
|---|---|---|
| Internal mgmt. | 411.9 | 339.1 |
| Stock index funds | 108.9 | 75.6 |
| Bond index funds | 13.8 | 10.3 |
| Real estate equity | 26.2 | 23.3 |
| Mortgages | 30.3 | 36.8 |
| Mortgage-backed securities | 50.5 | 30.8 |
| GICs | 10.5 | 12 |
| Overseas | 24.5 | 11.7 |
| Venture capital | 3.3 | 2.6 |
| Dedication/immunization | 29.4 | 23 |
| Oil & gas | 0.8 | 0.6 |
| LBOs | 2.8 | NA |
| Contribution paid | 40.3 | 42.4 |
| Benefits paid | 36.9 | 31.1 |
| Portfolio insurance | 8.6 | NA |

### Number of top 200 funds using alternative investments

| | 1986 | 1985 |
|---|---|---|
| Internal mgmt. | 121 | 117 |
| Stock index funds | 100 | 77 |
| Bond index funds | 32 | 18 |
| Real estate equity | 130 | 121 |
| Mortgages | 63 | 70 |
| Mortgage-backed securities | 98 | 67 |
| GICs | 62 | 62 |
| Overseas | 93 | 78 |
| Venture capital | 75 | 63 |
| Dedication/immunization | 37 | 42 |
| Oil & gas | 22 | 17 |
| LBOs | 26 | NA |
| Stock index futures | 63 | 45 |
| Fixed-income futures | 46 | 38 |
| Stock options | 62 | 49 |
| Fixed-income options | 22 | 18 |
| Portfolio insurance | 19 | NA |

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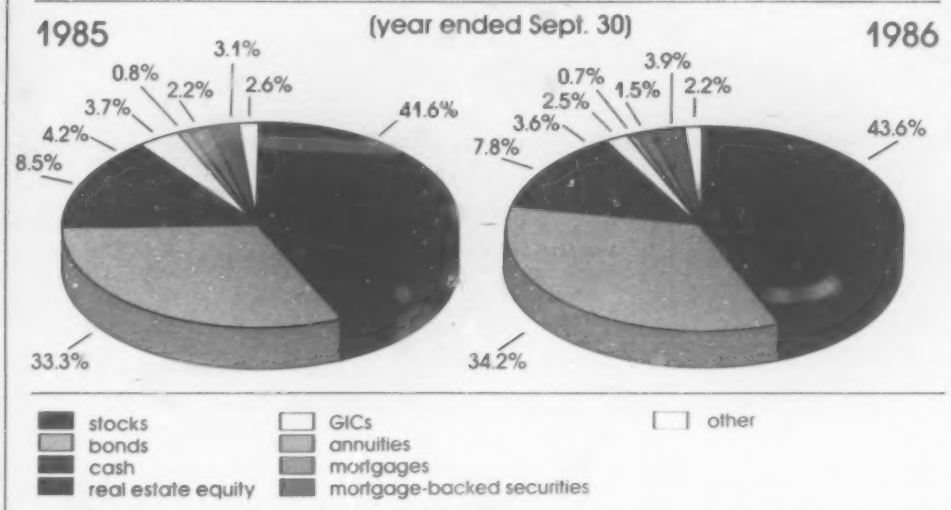
# Top 200 Funds
## Asset mix




## Top 200 asset mix

### Corporate

| | 1986 % | 1985 % |
|---|---|---|
| Stocks | 50.1 | 48.5 |
| Bonds | 27.7 | 25.6 |
| Cash | 7.9 | 8.1 |
| Real estate equity | 4.5 | 5.3 |
| GICs | 3.4 | 5.4 |
| Annuities | 1.3 | 1.2 |
| Mortgages | 0.5 | 1 |
| Mortgage-backed securities | 1 | 1 |
| Other* | 3.6 | 3.9 |

### Public

| | 1986 % | 1985 % |
|---|---|---|
| Stocks | 33.4 | 30.1 |
| Bonds | 44.2 | 46.5 |
| Cash | 7.8 | 8.9 |
| Real estate equity | 2.3 | 2.5 |
| GICs | 0.4 | 0.3 |
| Annuities | 0 | 0.3 |
| Mortgages | 2.9 | 3.8 |
| Mortgage-backed securities | 8.3 | 6.5 |
| Other* | 0.7 | 1.1 |

### Union

| | 1986 % | 1985 % |
|---|---|---|
| Stocks | 36.1 | 36.9 |
| Bonds | 39.2 | 32.7 |
| Cash | 7.9 | 12.6 |
| Real estate equity | 3.9 | 3.7 |
| GICs | 2.9 | 5.5 |
| Annuities | 0 | NA |
| Mortgages | 1.6 | 2.2 |
| Mortgage-backed securities | 4 | 4.2 |
| Other* | 4.4 | 2.2 |

* Other includes venture capital, oil and gas and misc. investments.

### Largest public funds
($ millions)

| Fund | Assets |
|---|---|
| California Public Employees | 37,700 |
| New York State Common Fund | 31,533 |
| New York City Retirement Systems | 30,839 |
| New York State Teachers | 20,235 |
| California State Teachers | 19,361 |
| New Jersey Division of Investment | 16,901 |
| Michigan State Employees | 13,580 |
| Ohio Public Employees | 13,567 |
| Wisconsin Investment Board | 13,500 |
| Texas Teachers | 13,198 |
| Ohio Teachers Retirement System | 12,484 |
| Florida Board of Administration | 11,544 |
| Pennsylvania School Employes | 10,078 |
| North Carolina Retirement Systems | 10,003 |
| Minnesota State Board | 8,658 |
| Georgia State Retirement Systems | 8,382 |
| Washington State Investment Board | 8,100 |
| Los Angeles County | 7,293 |
| Maryland State Retirement | 6,778 |
| Pennsylvania State Employees | 6,730 |
| Oregon Employes Retirement | 6,522 |
| Colorado Public Employees | 6,322 |
| Virginia Retirement System | 6,296 |
| Illinois Teachers | 5,952 |
| Arizona State Retirement System | 5,507 |
| **Total** | **331,063** |

### Largest corporate funds
($ millions)

| Fund | Assets |
|---|---|
| General Motors Corp. | 32,900 |
| American Telephone & Telegraph Co. | 30,340 |
| General Electric Co. | 22,891 |
| IBM Corp. | 18,191 |
| Ford Motor Co. | 14,600 |
| E.I. du Pont de Nemours & Co. Inc. | 12,218 |
| NYNEX Corp. | 11,962 |
| Ameritech | 10,478 |
| Bell Atlantic Corp. | 9,500 |
| USX Corp. | 9,400 |
| GTE Corp. | 8,962 |
| BellSouth Corp. | 8,750 |
| Pacific Telesis Group | 8,500 |
| Exxon Corp. | 7,550 |
| U S WEST Inc. | 7,350 |
| Boeing Co. | 7,200 |
| Sears Roebuck & Co. | 6,784 |
| Eastman Kodak Co. | 6,631 |
| Allied-Signal Inc. | 6,600 |
| Southwestern Bell Corp. | 6,208 |
| United Technologies Corp. | 6,108 |
| Lockheed Corp. | 6,085 |
| Rockwell International | 5,986 |
| Chevron Corp. | 5,898 |
| Shell Oil Co. | 5,811 |
| **Total** | **276,903** |

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## Bottom 800 asset mix

### Corporate

| | 1986 % | 1985 % |
|---|---|---|
| Stocks | 49.9 | 47.7 |
| Bonds | 25.8 | 20.2 |
| Cash | 10 | 9.7 |
| Real estate equity | 3.8 | 3.8 |
| GICs | 5.1 | 12.7 |
| Mortgage-backed securities | 0.7 | * |
| International | 2.5 | 1.3 |
| Options | 0.1 | * |
| Futures | 0.2 | * |
| Venture capital | 0.4 | * |
| Oil & gas | 0.1 | * |
| Other* | 1.4 | 4.6 |

### Public

| | 1986 % | 1985 % |
|---|---|---|
| Stocks | 37.4 | 36.1 |
| Bonds | 38 | 40.7 |
| Cash | 11.2 | 12.4 |
| Real estate equity | 3.6 | 3.5 |
| GICs | 1.2 | 2.3 |
| Mortgage-backed securities | 3.7 | * |
| International | 0.4 | NA |
| Options | 0.1 | * |
| Futures | 0 | * |
| Venture capital | 0.2 | * |
| Oil & gas | 0 | * |
| Other* | 4.2 | 5 |

### Union

| | 1986 % | 1985 % |
|---|---|---|
| Stocks | 29.5 | 26 |
| Bonds | 37.6 | 39.7 |
| Cash | 10.3 | 10.6 |
| Real estate equity | 4 | 3.1 |
| GICs | 5.7 | 6.2 |
| Mortgage-backed securities | 7.1 | * |
| International | 0.4 | 0.1 |
| Options | 0.2 | * |
| Futures | 0 | * |
| Venture capital | 0.2 | * |
| Oil & gas | 0 | * |
| Other* | 5 | 14.3 |

* Other includes mortgages and annuities. In 1985 it also included mortgage-backed securities, options, futures, venture capital and oil and gas.

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## The top 10 in leveraged leasing

| Company | Total volume ($ mils.) | Underwriters |
|---|---|---|
| Northwest Airlines | 760.1 | First Boston; Bankers Trust |
| Catalyst Energy Development | 706.9 | Drexel Burnham Lambert; Goldman, Sachs |
| Public Service Co. of New Mexico | 575 | Kidder, Peabody; Drexel Burnham Lambert; Goldman, Sachs |
| Bethlehem Steel | 495 | Morgan Guaranty Trust; Goldman, Sachs |
| Arizona Public Service | 491.3 | First Boston |
| Fred Meyer | 397.7 | Goldman, Sachs |
| Delta Air Lines | 384.1 | Citicorp |
| IBM Credit[1] | 367 | Merrill Lynch Capital Markets |
| American Airlines | 344.3 | Merrill Lynch Capital Markets; Salomon Brothers; PaineWebber; Babcock & Brown Financial; Bankers Trust |
| Western Air Lines[2] | 314.7 | PaineWebber; Salomon Brothers |

[1] Partnership between IBM Credit and outside investors
[2] Merged with Delta September 1986
Source: IDD Information Services Inc., New York

## Summary of voting results of shareholder rights proposals

| Company | Proposal sponsor | % institutional ownership 3/31/87 | Georgeson & Co. Report % voting for proposal: as a % of outstanding (with abstentions) | Georgeson & Co. Report % voting for proposal: as a % of shares voting on proposal (with abstentions) | IRRC % voting for proposal: as a % of shares voted (no abstentions) | IRRC % voting for proposal: as a % of shares voting on proposal (with abstentions) |
|---|---|---|---|---|---|---|
| AMR | CalSTRS | 31 | 27.4 | 37.9 | 46.9 | 37.9 |
| American Cyanamid | CREF | 58 | 19.8 | 28 | 28.4 | 28 |
| Anheuser-Busch | CalSTRS/CalPERS[1] | 53 | 10.4 | 15.9 | 16.4 | 15.9 |
| Champion International | Carpenters | 61 | 19.9 | 30.7 | 33.2 | 30.7 |
| Colgate-Palmolive | CalSTRS/CalPERS | 45 | 13.8 | 21.4[3] | 21.4 | NA |
| Control Data | CalSTRS | 69 | 18.4 | 28.9 | 29.7 | 29 |
| Eaton | CREF | 54 | 24.8 | 32.6 | 32.7 | 28 |
| Emery Air Freight | State of Wisconsin | 48 | 26 | 33.9 | 41.4 | 33.9 |
| Federated Department Stores | CREF | 73 | 27.8 | 36.2 | 36.2 | 34 |
| Great Northern Nekoosa | CalSTRS/CalPERS | 68 | 28.6 | 40.2[4] | 40.2 | 40.2 |
| Honeywell | CalSTRS/CalPERS, State of Wisconsin | 67 | 12.9 | 25.5[3] | 25.5 | 20.3 |
| Hospital Corp. of America | CalSTRS/CalPERS | 61 | 24.5 | 35.1 | 35.8 | 35 |
| International Paper | CREF | 56 | 18.7 | 26.3 | 27.7 | 26.4 |
| Kraft | CalSTRS/CalPERS | 50 | 15.5 | 22.4[3] | 22.4 | 21.8 |
| Kroger | CalSTRS/CalPERS | 35 | 17 | 22.4 | 22.4 | 20.9 |
| Louisiana Land & Exploration | CalSTRS/CalPERS | 67 | 19.9 | 25 | 27.1 | 25 |
| McDonald's | CalSTRS/CalPERS | 57 | 25.3 | 32.3 | 35.4 | 32.3 |
| Mobil | Individual | 45 | 20.1 | 27.2 | 27.2 | 25.6 |
| Monsanto | CalSTRS/CalPERS | 63 | 20.8 | 26.8 | 30.8 | 26.9 |
| NCR | CalSTRS/CalPERS | 66 | 21.6 | 26.4 | 29.9 | 26.4 |
| J.C. Penney | CREF | 61 | 25.3 | 29.2 | 31.5 | NA |
| Pitney Bowes | CREF | 68 | 23.9 | 32.6[3] | 32.6 | 28.6 |
| Raytheon | CREF | 60 | 20.9 | 30.2 | 30.2 | 26 |
| Santa Fe Southern Pacific | Individual | 44 | 14 | 20.1 | 20.1 | 16.6 |
| Schering-Plough | CREF | 60 | 19.7 | 27.1[3] | 27.1 | 26.2 |
| Texaco | CalSTRS/CalPERS | 42 | 16.7 | 26.9[3] | 26.8 | 21.5 |
| Unisys | CalSTRS/CalPERS | 67 | 12.5 | 19.2[3] | 22.3 | 19.2 |
| United Technologies | CREF | 54 | 24.3 | 28.3 | 32.9 | 28.3 |
| Upjohn | CalSTRS/CalPERS | 59 | 26.8 | 34.5 | 40 | NA |
| USG | CalSTRS/CalPERS | 43 | [2] | [2] | 27.9[5] | NA |
| USLife | CalSTRS/CalPERS | 53 | 18.5 | 25.1 | 26.2 | 25.1 |

[1] California Teachers/California Public Employees
[2] Not voted at meeting
[3] Without abstentions
[4] Using total quorum
[5] The proponent did not appear in time
NA not available


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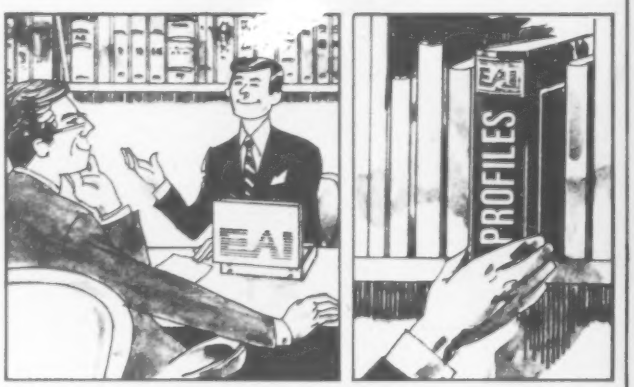


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## Top underwriters for first half of 1987 - all issues

### U.S. market

| Firm | $ mil. | Issues |
|---|---|---|
| 1. Salomon Brothers | 23,737 | 151 |
| 2. First Boston | 20,281.4 | 117 |
| 3. Merrill Lynch | 18,797.9 | 133 |
| 4. Goldman, Sachs | 17,016.1 | 121 |
| 5. Morgan Stanley | 16,085.8 | 112 |
| 6. Drexel Burnham | 11,246.1 | 100 |
| 7. Shearson Lehman | 10,468.9 | 96 |
| 8. Kidder, Peabody | 7,031.4 | 56 |
| 9. Bear, Stearns | 3,482 | 35 |
| 10. Smith Barney | 2,772.6 | 32 |
| 11. Prudential-Bache | 2,714.5 | 29 |
| 12. Alex. Brown | 2,616.9 | 30 |
| 13. Dillon, Read | 2,536.3 | 22 |
| 14. Wheat, First | 2,014.3 | 5 |
| 15. Dean Witter | 1,898.2 | 21 |

Source: IDD Information Services, New York

### U.S. issuers (worldwide)*

| Firm | $ mil. | Issues |
|---|---|---|
| 1. Salomon Brothers | 24,600.2 | 155 |
| 2. First Boston | 21,244.5 | 124 |
| 3. Merrill Lynch | 17,838 | 122 |
| 4. Morgan Stanley | 16,863 | 114 |
| 5. Goldman, Sachs | 16,524.4 | 120 |
| 6. Drexel Burnham | 11,299.6 | 99 |
| 7. Shearson Lehman | 11,052.6 | 101 |
| 8. Kidder, Peabody | 6,957.5 | 57 |
| 9. Bear, Stearns | 3,468.3 | 34 |
| 10. Prudential-Bache | 2,841.4 | 30 |
| 11. Smith Barney | 2,772.6 | 32 |
| 12. Alex. Brown | 2,616.9 | 30 |
| 13. Dillon, Read | 2,536.3 | 22 |
| 14. Wheat, First | 2,014.3 | 5 |
| 15. Dean Witter | 1,898.2 | 21 |

* Excludes international equities

### Worldwide**

| Firm | $ mil. | Issues |
|---|---|---|
| 1. Salomon Brothers | 26,947.2 | 177 |
| 2. First Boston | 24,952.4 | 161 |
| 3. Merrill Lynch | 19,689.7 | 143 |
| 4. Morgan Stanley | 18,991 | 137 |
| 5. Goldman, Sachs | 18,211.1 | 133 |
| 6. Nomura | 12,598.5 | 85 |
| 7. Shearson Lehman | 11,755.1 | 110 |
| 8. Drexel Burnham | 11,473.7 | 102 |
| 9. Kidder, Peabody | 7,181.4 | 59 |
| 10. Daiwa Securities | 6,653.7 | 53 |
| 11. Yamaichi | 5,302.2 | 51 |
| 12. Union Bank/Switz. | 5,113.1 | 57 |
| 13. Deutsche Bank | 4,835.3 | 45 |
| 14. Nikko Securities | 4,375.5 | 36 |
| 15. Swiss Bank | 4,082.9 | 50 |

** All issuers, excludes international equities


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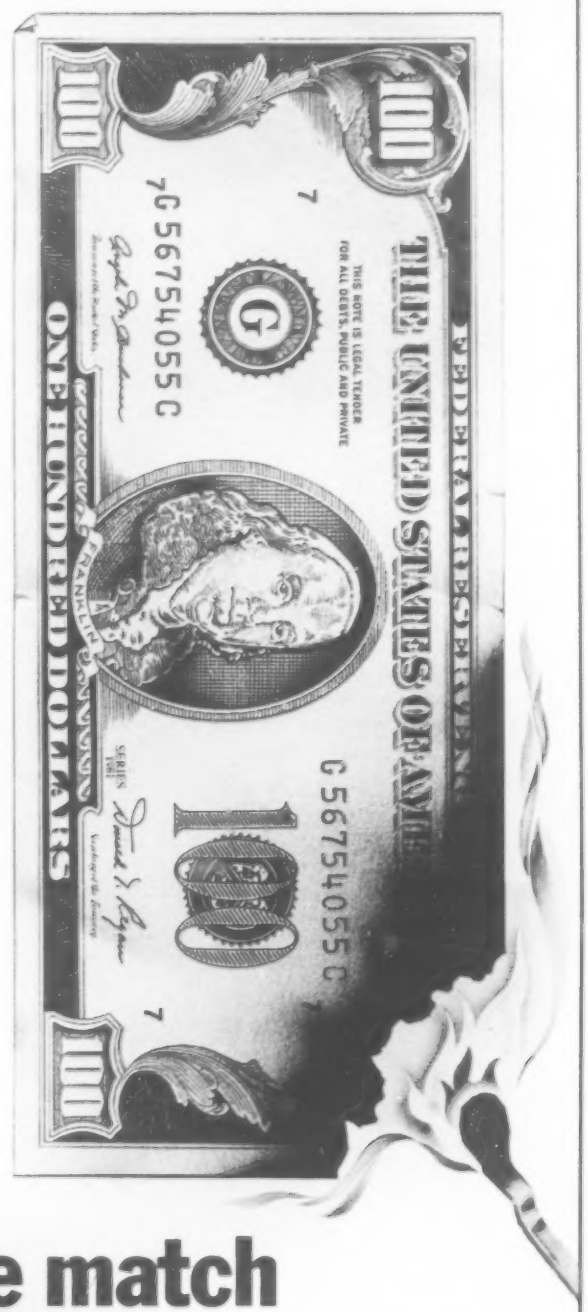


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# People

## Corporate

Procter & Gamble Co. has elected two officers. **Edwin H. Eaton**, former vice president and treasurer, was named vice president and comptroller. **George M. Gibson**, former vice president and comptroller, was named vice president and treasurer. The moves represent an exchange of responsibilities to broaden the experience of both officers.

The Monsanto Co., St. Louis, has announced corporate changes. **B. Clare Harris** has been promoted to vice president and controller. He has been with Monsanto since 1973, most recently as treasurer. He will be responsible for financial reporting and controls, budgeting, analysis and maintaining accounting records.

**Juanita H. Hinshaw** succeeds Mr. Harris as treasurer. She will be responsible for corporate finance, cash management operations, risk management, foreign exchange and corporate real estate. Ms. Hinshaw has been with Monsanto since 1984 when she joined as assistant treasurer.

**Lawrence B. Skatoff** has been appointed vice president-finance. His responsibilities include pension asset management, corporate acquisition and divesture activities along with internal and external financial reporting. Mr. Skatoff joined Monsanto in 1972 as assistant corporate controller.

## Managers

**Richard J. Rice** has been named senior vice president of Cedar Hill Associates Inc., Chicago. Mr. Rice formerly was president of Rodman Properties and senior vice president of Rodman & Renshaw Inc.

**Herringer**

Ariel Capital Management Inc., Chicago, has promoted **Nancy L. Herringer** and **Darice M. Wright**. Ms. Herringer, formerly a research analyst/portfolio manager, was named executive vice president. Before joining Ariel in 1984, she was an investment broker for William Blair & Co. Ms. Wright, formerly director of marketing and client services, was named senior vice president. Before coming to Ariel in 1984, Ms. Wright worked as an investment broker for Dean Witter.

**Wright**

**Frank L. "Chip" Gillis** has been named senior vice president-pension marketing for Southwestern Life Insurance Co., Dallas. He will be responsible for the company's pensions and annuities unit, including marketing of all fixed and variable annuities and group pension products.

**Phillips**

ASB Capital Management Inc., Washington, the investment subsidiary of American Security Bank, has announced the appointment of **Robert M. Phillips** as senior vice president responsible for the money management department. Mr. Phillips had been vice president in charge of investment counseling for Maryland National Bank; he joined ASB as a result of the trust division consolidation of American Security Bank and Maryland National.

Constitution Capital Management Co., a subsidiary of Bank of New En, Ltd Corp., has named **Harry Sterling Jr.** senior vice president, managing director and director of marketing. Before joining Constitution Capital Management, he was director of client services for State Street Bank and Trust Co.

**Robin R. Pinkham** has joined Hutton Capital Management as senior portfolio

# People

manager and vice president of E.F. Hutton & Co. Before joining Hutton, Ms. Pinkham managed the in-house pension fund at National Forge Co.

**Marshall Rauccl Jr.** has joined Norstar Investment Advisory Services Inc. as vice president and marketing director. In his new position, he will coordinate all marketing and sales activities for Norvest.

**Richard L. Deeter** has joined Harris Bank, Chicago, as vice president in the trust department. Mr. Deeter, formerly trust vice president at the First National Bank of Chicago, now is a sales executive for the bank's master trust services to U.S. corporations and institutions.

## Real estate

Skram

ASB Capital Management Inc., Washington, the investment subsidiary of American Security Bank has named **John Skram** vice president of real estate investments. Mr. Skram had been general manager of Prudential Bache for six years prior to joining ASB. He will be responsible for originating new real estate investments and managing real estate investment portfolios.

Lowman

**Paul R. Lowman** has been named director of real estate investments. Before joining ASB, Mr. Lowman was executive vice president and general manager for real estate investments at General Electric Credit Corp. At ASB, Mr. Lowman will serve as an investment adviser for pension fund trustees regarding investment opportunities.

**Richard J. Astoreca** has joined the property management division of Albert B. Ashforth Inc. as senior vice president of finance and administration. He will be responsible for all accounting, management information systems and administrative functions.

Prior to joining Ashforth he served as vice president of finance and chief financial officer for GHA Lock Joint Inc. of New Jersey.

## Organizations

The Profit Sharing Research Foundation has elected new officers. They are: Chairman **John W. Cooper**, vice president, Harris Trust and Savings Bank; Vice Chairman **Mary Ann Lambertsen**, vice president-human resources, Fisher-Price; and Treasurer **Thomas Young Jr.**, president, Young Electric Sign Co. **David Wray**, president of the Profit Sharing Council of America, was named executive director and secretary.

**Gilbert L. Beebower**, executive vice president of SEI Corp., was named to the Presidential Task Force on Market Mechanisms. The task force is analyzing the causes of the Oct. 19 stock market crash and identify any problems that might threaten the short-term liquidity or long-term solvency of the markets. Other panel members include **Nicholas F. Brady**, chairman of Dillon Read & Co.; **Howard M. Stein**, chairman of Dreyfus & Co.; and **Robert G. Kirby**, chairman of Capital Guardian Trust Co.

**David J. MacKenzie** has been named president and chairman of the board of the International Foundation of Employee Benefit Plans, based in Brookfield, Wis. Mr. MacKenzie is executive director of the Textile Rental Services Association. **Gerald A. Mele** was named president-elect; he is president and chief executive officer of TEDRO and Associates Inc. **Walter J. Butler** was named secretary; he is international vice president of the Service Employees International Union. Named treasurer was **Charles W. Breitsman**, executive director of Laurel Mechanical Contractors Association Inc.

Earlier, the foundation named **Ardyce Myhre** the director of education. Ms. Myhre, who joined the foundation in 1970, will be responsible for all aspects of foundation educational programs.

## Top underwriters for first half of 1987 - bond issues

### Straight debt

| Firm | $ mil. | Issues |
|---|---|---|
| 1. Salomon Brothers | 21,914.2 | 125 |
| 2. First Boston | 17,585.6 | 90 |
| 3. Merrill Lynch | 14,541.7 | 77 |
| 4. Morgan Stanley | 12,784.1 | 77 |
| 5. Goldman, Sachs | 11,965 | 74 |
| 6. Drexel Burnham | 8,175.8 | 52 |
| 7. Shearson Lehman | 6,829.1 | 51 |
| 8. Kidder, Peabody | 4,943.7 | 28 |
| 9. Bear, Stearns | 2,694.4 | 21 |
| 10. Prudential-Bache | 2,333.7 | 18 |
| 11. Dillon, Read | 2,194.5 | 15 |
| 12. Dean Witter | 1,131.8 | 6 |
| 13. Smith Barney | 1,092.2 | 11 |
| 14. L.F. Rothschild | 854.9 | 8 |
| 15. E.F. Hutton | 762.6 | 8 |

### Convertible debt

| Firm | $ mil. | Issues |
|---|---|---|
| 1. Smith Barney | 1,200 | 9 |
| 2. Goldman, Sachs | 985 | 11 |
| 3. Morgan Stanley | 960 | 11 |
| 4. Drexel Burnham | 780 | 16 |
| 5. First Boston | 535 | 3 |
| 6. Lazard Freres | 465 | 6 |
| 7. Alex. Brown | 465 | 6 |
| 8. Salomon Brothers | 435 | 3 |
| 9. Shearson Lehman | 430 | 6 |
| 10. Kidder, Peabody | 417 | 6 |
| 11. Bear, Stearns | 225 | 5 |
| 12. Merrill Lynch | 210 | 3 |
| 13. Dean Witter | 115 | 3 |
| 14. Dillon, Read | 100 | 1 |
| 15. PaineWebber | 75 | 1 |

### Junk bonds

| Firm | $ mil. | Issues |
|---|---|---|
| 1. Drexel Burnham | 5,430.9 | 41 |
| 2. Morgan Stanley | 1,873.3 | 9 |
| 3. First Boston | 1,806.2 | 8 |
| 4. Merrill Lynch | 1,215.7 | 10 |
| 5. Salomon Brothers | 703.1 | 8 |
| 6. Donaldson, Lufkin | 492.7 | 3 |
| 7. Dean Witter | 321.5 | 2 |
| 8. Goldman, Sachs | 300 | 1 |
| 9. Kidder, Peabody | 253.9 | 3 |
| 10. Smith Barney | 248.7 | 1 |
| 11. Bear, Stearns | 104.9 | 2 |
| 12. PaineWebber | 100 | 1 |
| 13. L.F. Rothschild | 85 | 1 |
| 14. Shearson Lehman | 50 | 1 |
| 15. E.F. Hutton | 32.2 | 1 |

Source: IDD Information Services, New York


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## Top underwriters for first half of 1987 - stock issues

### Common stock

| Firm | $ mil. | Issues |
|---|---|---|
| 1. Goldman, Sachs | 3,281.1 | 23 |
| 2. Merrill Lynch | 2,927 | 36 |
| 3. Shearson Lehman | 2,321.8 | 29 |
| 4. Alex. Brown | 2,151.9 | 24 |
| 5. Wheat, First | 1,950 | 2 |
| 6. Drexel Burnham | 1,712.4 | 22 |
| 7. First Boston | 1,355.6 | 15 |
| 8. Morgan Stanley | 1,097 | 14 |
| 9. Kidder, Peabody | 1,088.2 | 17 |
| 10. Salomon Brothers | 912.8 | 15 |
| 11. Wertheim Schroder | 554.8 | 4 |
| 12. Smith Barney | 480.3 | 12 |
| 13. Dean Witter | 462.4 | 10 |
| 14. E.F. Hutton | 429.6 | 9 |
| 15. Lazard Freres | 362.9 | 5 |

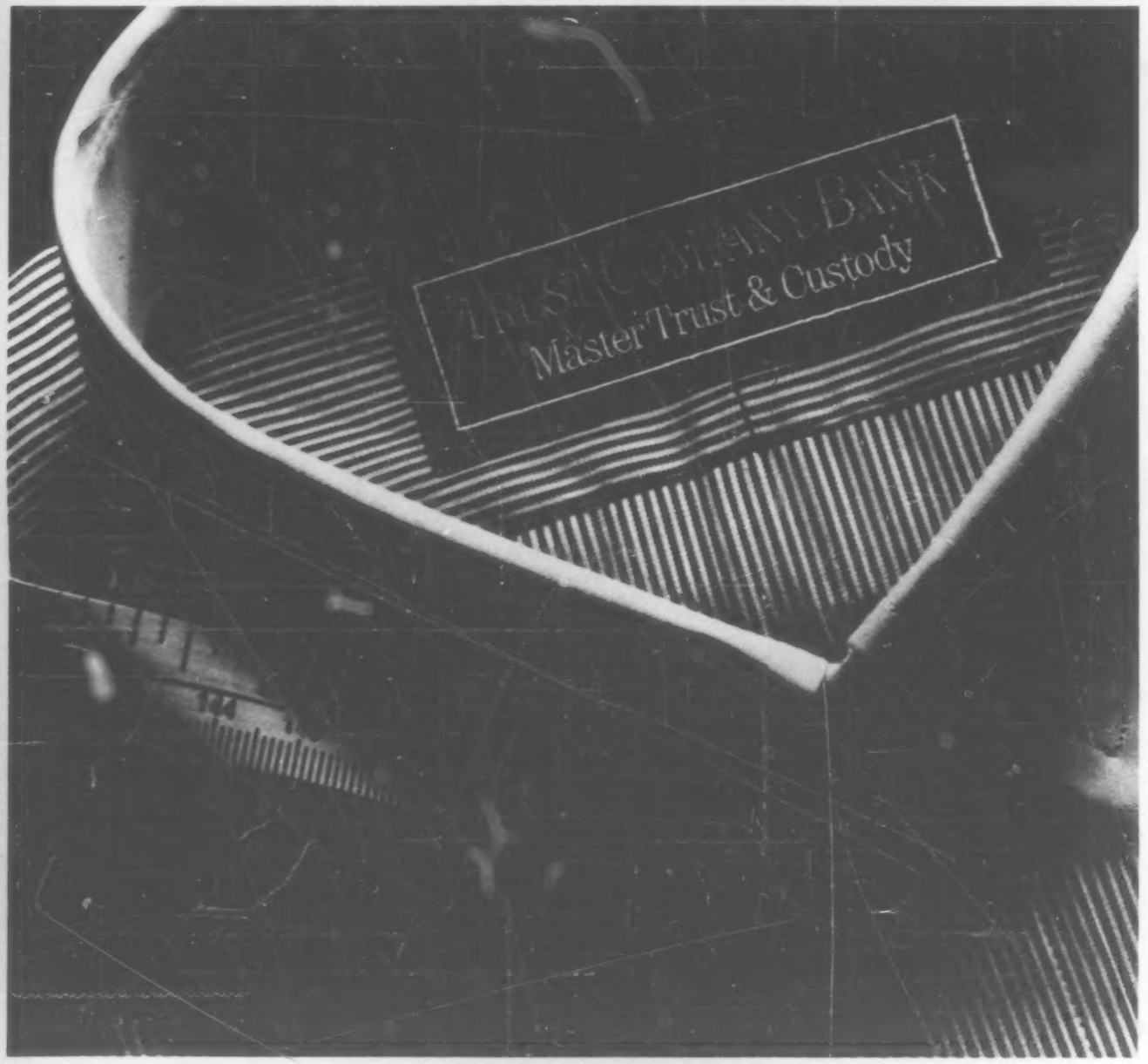
### Straight preferred

| Firm | $ mil. | Issues |
|---|---|---|
| 1. Merrill Lynch | 853 | 14 |
| 2. Goldman, Sachs | 650 | 11 |
| 3. First Boston | 551.5 | 6 |
| 4. Morgan Stanley | 519.7 | 6 |
| 5. Salomon Brothers | 475 | 8 |
| 6. Shearson Lehman | 431.1 | 5 |
| 7. Drexel Burnham | 375 | 6 |
| 8. Bear, Stearns | 280 | 4 |
| 9. Oppenheimer | 270 | 2 |
| 10. Kidder, Peabody | 115 | 2 |
| 11. PaineWebber | 61.4 | 2 |
| 12. E.F. Hutton | 50 | 1 |
| 13. Interstate Securities | 10 | 1 |
| 14. B.C. Christopher | 3.1 | 1 |

### Convertible preferred

| Firm | $ mil. | Issues |
|---|---|---|
| 1. Morgan Stanley | 725 | 4 |
| 2. Kidder, Peabody | 467.5 | 3 |
| 3. Shearson Lehman | 456.8 | 5 |
| 4. Merrill Lynch | 266.2 | 3 |
| 5. First Boston | 253.7 | 3 |
| 6. Drexel Burnham | 203 | 4 |
| 7. Dean Witter | 189 | 2 |
| 8. Donaldson, Lufkin | 150 | 1 |
| 9. Goldman, Sachs | 135 | 2 |
| 10. PaineWebber | 125 | 2 |
| 11. Eastlake Securities | 60 | 1 |
| 12. Bear, Stearns | 57.5 | 2 |
| 13. Butcher & Singer | 12 | 1 |
| 14. L.C. Wegard | 6 | 1 |

Source: IDD Information Services, New York

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# Divested returns scattered

By Trudy Ring

NEW YORK — South Africa-free equity portfolios underperformed the Standard & Poor's 500 stock index for periods ended Sept. 30, according to The Brian Rom Co., a consulting firm.

However, the divested portfolios outperformed median actively managed unrestricted portfolios in some periods.

In the third quarter, the median South Africa-free portfolio in the Rom universe returned 6% to the S&P 500's 6.6%. The South Africa-free version of the index matched the median portfolio's return.

The median unrestricted portfolio, as measured by the Wilshire Cooperative Universe of Wilshire Associates, Santa Monica, Calif., returned 5.6% in the quarter.

For the year ended Sept. 30, the median South Africa-free portfolio returned 33%, compared with 42.8% for the full S&P 500 and 39.5% for the index minus stocks of companies with South African operations. The median unrestricted portfolio in the Wilshire universe returned 33.8%.

For the three years ended Sept. 30, the median South Africa-free portfolio returned 27.5% on a compound annual basis, compared with 29% for the full index and 27.2% for the South Africa-free index. The median unrestricted portfolio returned 25.7%.

The Rom South Africa-free universe consists of 70 portfolios run by 37 managers. Of the portfolios, 37 are fully divested of South Africa-related stocks and 33 are partially divested. There are 66 actively managed portfolios and four passive ones. The portfolios have $6.4 billion in assets.

Some managers of South Africa-free portfolios outperformed the S&P 500 significantly. Ariel Capital Management Inc., Chicago, was tops in the third quarter and the three-year period, with returns of 14.1% and 33.6% respectively.

Ariel specializes in high-quality, undervalued companies that have been ignored by the market, said John W. Rogers Jr., president. Managing South Africa-free portfolios isn't a problem, he said, as Ariel generally doesn't invest in companies with distant geographic operations.

Ariel's third-quarter performance benefited from holding two companies that were the subject of takeovers: **G. Heileman Brewing Co.**, which agreed to be acquired by Bond Corp. Holdings Ltd., Perth, Australia, and **Kenner Parker Toys**, which agreed to be bought by Tonka Corp., Minnetonka, Minn.

Provident Investment Counsel Inc., Pasadena, Calif., topped managers for the 12 months ended Sept. 30 with a 47.8% return.

Provident Investment is a growth-oriented, bottom-up manager that tends to be in domestically oriented companies anyway, so a South Africa restriction doesn't affect it significantly, said Jeff Miller, executive vice president.

Good performers during the year ended Sept. 30 included technology companies such as **Digital Equipment Corp.** and **Apple Computer Inc.**

Early in the period, retail stocks were good performers, Mr. Miller said; one that did well for Provident Investment was **The Limited Inc.**, which the firm has since sold. ■

## Datebook

**Jan. 6-7**, Boston: A seminar "704(b) Partnership Allocation Regulations & Passive Activity Rules" is sponsored by Laventhol & Horwath. For information contact Jill McDonough at (212) 980-3100, ext. 713.

**Jan. 14-15**, New York: "Taxation of Financial Instruments" is co-sponsored by the American Law Institute-American Bar Association Committee on Continuing Professional Education and the American Institute of Certified Public Accountants. For information contact Donald M. Maclay at (215) 243-1630 or (800) CLE-NEWS.

**Jan. 14-15**, New York; **Feb. 4-5**, Long Beach, Calif.: American Banker-Bond Buyer is sponsoring "Securitization: Understanding the Elements of Successful Securitization Activities." For information call (212) 943-2221.

**Jan. 18-22**, Palm Beach, Fla.: "The Effective Executive Workshop, Unit Two" is sponsored by The Center of Executive Education of Johnson Graduate School of Management at Cornell University. For information call (212) 686-2828.

**Jan. 21-22**, Washington: The American Law Institute-American Bar Association Committee on Continuing Professional Education and the Securities Law Committee of the Federal Bar Association are co-sponsoring "Broker-Dealer Regulation." For information contact Donald Maclay at (800) CLE-NEWS, ext. 1630 or (215) 243-1630.

**Jan. 21-22**, New York: A seminar on "Pension and Welfare Benefits in Bankruptcy" is presented by the Practising Law Institute. For information call (212) 765-5700, ext. 271.

**Jan. 21-22**, New York; **Feb. 11-12**, San Francisco: The Practising Law Institute is sponsoring "Leveraged Acquisitions and Buyouts." For information call (212) 765-5700, ext. 271.

**Jan. 21**, Los Angeles; **Jan. 25**, Chicago: The Bank Securities Association will have formation luncheon meetings administered by The Bankers Institute. For information call (415) 924-1420.

**Jan. 25-29**, Palm Springs, Calif.: "The Effective Executive Workshop, Unit One" is sponsored The Center for Executive Education of Johnson Graduate School of Management at Cornell University. For information call (212) 686-2828.

**Jan. 26**, Chicago: "Indexed Deposit Accounts" seminar is sponsored by The Bankers Institute. For information call (415) 924-1420.

**Jan. 26-27**, Washington: Charles D. Spencer & Associates Inc. is sponsoring "Spencer's Fifth Annual Flexible Compensation Conference." For information call (312) 236-2615.

**Jan. 26-27**, New York: "Asset Securitization" is sponsored by the Institute for International Research. For information call (212) 883-1770 or (800) 345-8016.

**Jan. 26**, Dallas; **Jan. 27**, Houston; **Jan. 28**, San Antonio, Texas: "The Economic Outlook in 1988" is sponsored by the Texas Bankers Association in cooperation with Baylor University and Wharton Econometrics. For information call (817) 755-3492.

**Jan. 26-28**, San Francisco: "The Future of Tax-Exempt Fund Management: Disaster or Opportunity?" will be discussed at Callan Investments Institute Eighth Annual National Conference. For information contact Deanne Christopulos at (415) 974-5060.

**Jan. 27-28**, Newport Beach, Calif.: Pacific Financial Cos. is sponsoring a pension investment symposium featuring guest speaker Dr. Peter F. Drucker. For information call (714) 640-3030.

**Jan. 27-28**, Los Angeles: "Proven Strategies for Effectively Structuring and Managing Privatization Contracts" is sponsored by the Institute for International Research. Call (212) 883-1770 or (800) 345-8016.

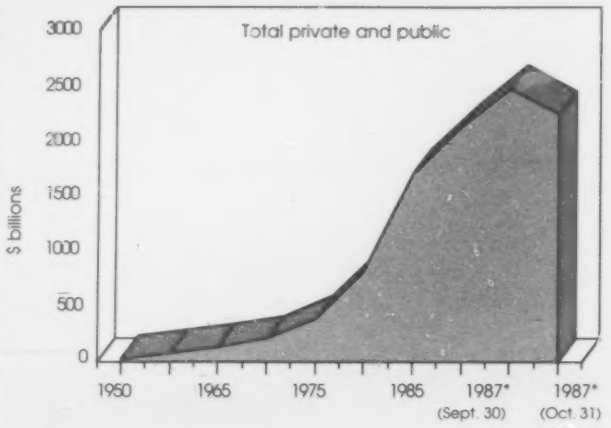
**Jan. 28-29**, New York; **Feb. 25-26**, San Francisco: "Asset-Based Lending Including Commercial Finance and Acquisition Financing" is sponsored by the Practising Law Institute. For information call (212) 765-5700, ext. 271.

**Jan. 29**, New York: "Currency Management & Protection" is sponsored by the Institute for International Research. For information call (212) 883-1770 or (800) 345-8016.

**Feb. 2-3**, Los Angeles: The "1988 Finan-

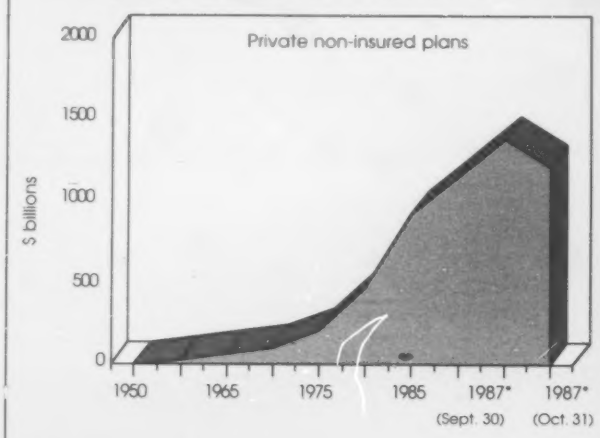
*Continued on page 35*

### Historic growth of pension assets



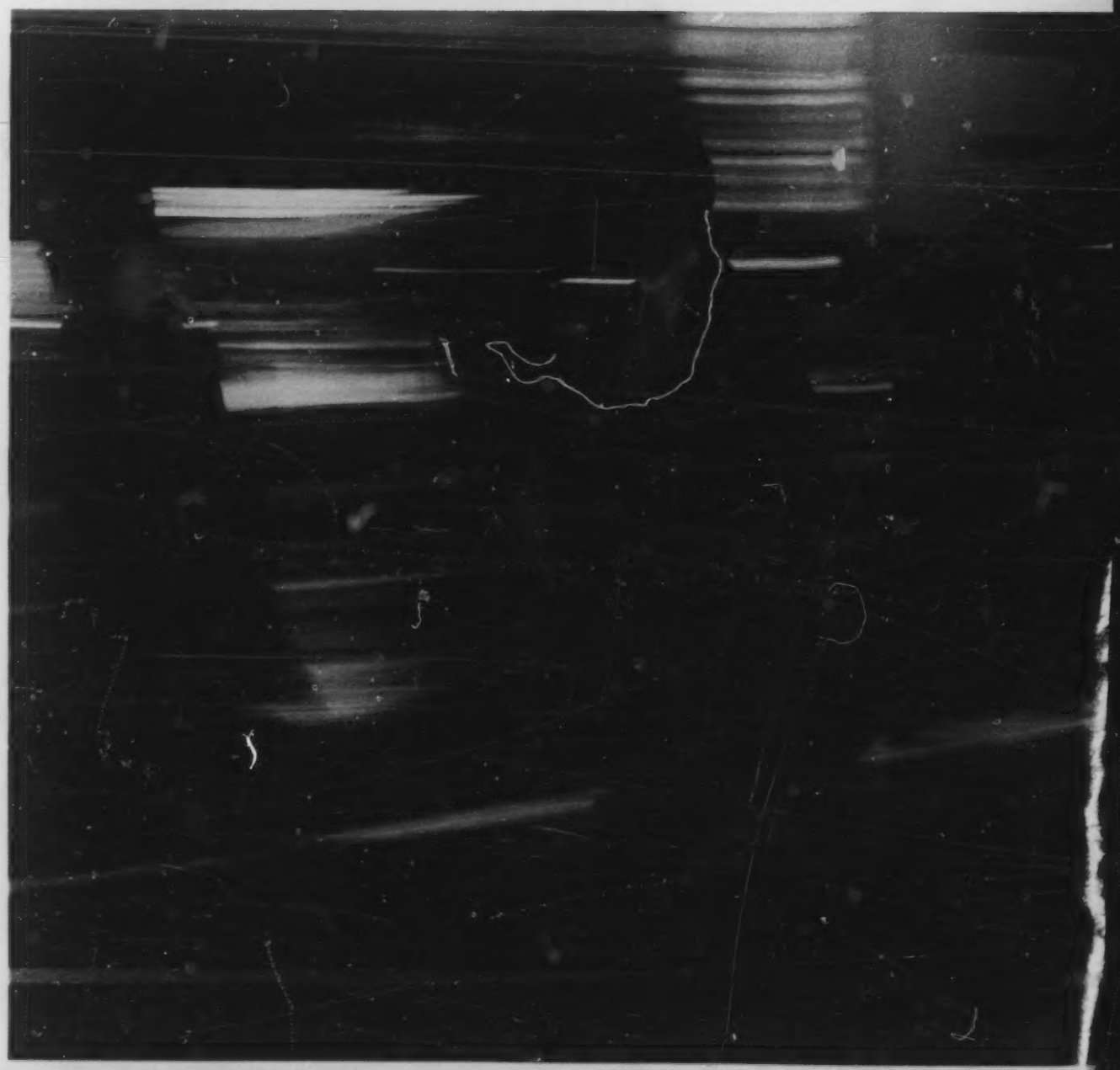

**Pensions & Investment Age* estimates
Sources: EBRI, Council on Life Insurance

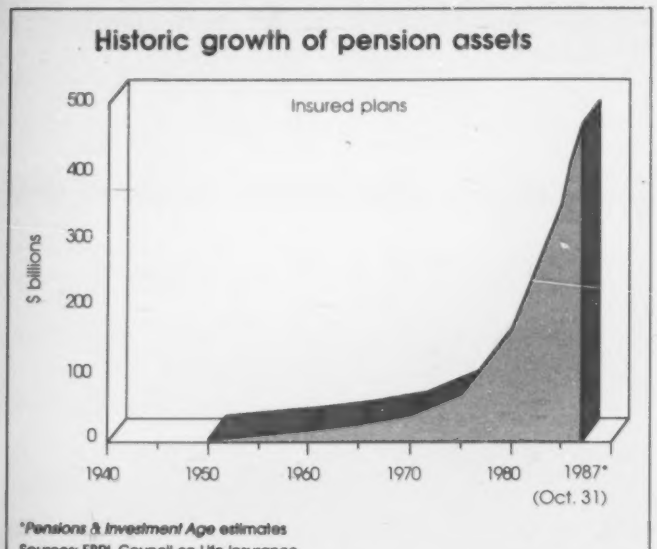
### Historic growth of pension assets

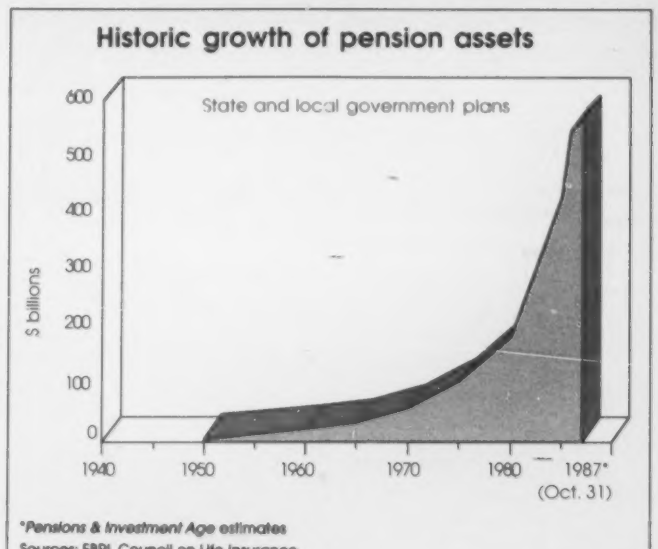



**Pensions & Investment Age* estimates
Sources: EBRI, Council on Life Insurance

BellSouth







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## Datebook

*Continued from page 34*

cial Investment Management Exposition and Conference" will feature program trading and computers. For information call (212) 286-0333.

**Feb.3-6**, Captiva Island, Fla.: "Managing Portfolio Risk with Derivative Instruments" is co-sponsored by The Chicago Board of Trade and The Chicago Board Options Exchange. For information call the CBOE at (312) 786-7477 or the CBOT at (312) 347-3821.

**Feb. 4-5**, Dallas: Laventhol & Horwath is presenting the fourth annual Hotel-Motel Development Conference. For information contact Jill McDonough at (212) 980-3100, ext. 713.

**Feb.8-11**, Washington; **Feb. 23-26**, New York; **March 14-17**, San Francisco; **March 28-31**, Philadelphia; **April 11-14**, Chicago: The American Management Association is sponsoring a course on "Financial Analysis." For information call (518) 891-0065.

**Feb. 10**, Cleveland: "Techniques in Collecting Accounts Receivable" is presented by the Business and Professional Research Institute. For information call (802) 757-2396.

**Feb. 17-19**, Coronado, Calif.: The 12th annual "Tax and Business Planning" course is sponsored by the American Law Institute-American Bar Association Committee on Continuing Professional Education. For information contact Donald M. Maclay, director, at (215) 243-1630 or (800) CLE-NEWS.

**Feb. 18-19**, Miami: The Eighth Annual Southern Securities Institute is co-sponsored by the American Law Institute-American Bar Association and The Florida Bar Association. For information contact Donald M. Maclay, director, courses of study at (215) 243-1630 or (800)CLE-NEWS.

**Feb. 25-26**, Philadelphia; **April 7-8**, Atlanta; **April 7-8**, Boston: "Leasing Techniques and Analysis" is presented by the American Management Association. For information call (518) 891-0065.

### REAL ESTATE

**Jan. 12-13**; Dallas; **Jan. 26-27**, Los Angeles: Laventhol & Horwath presents a seminar on "Real Estate Workouts." For information, call Jill McDonough at (212) 980-3100, ext. 713.

**Jan. 14-15**, New York: The Practising Law Institute presents "Securitization of Commercial Real Estate." For information, call (212) 765-5700, ext. 271.

**Jan. 31-Feb. 2**, Scottsdale, Ariz.: The National Council for Urban Economic Development presents a conference on "Mixed-Use Development: What's the Formula for Success?" For information, call (202) 223-4735.

**Feb. 9-10**, Los Angeles: The Pension Real Estate Association will conduct its 1988 winter meeting. For information, call (202) 296-4141.

### CASH MANAGEMENT

**Jan. 18-19**, New York; **Feb. 1-2**, Fort Lauderdale, Fla.; **Feb.8-9**, New York; **Feb. 29-March 1**, Dallas; **March 7-8**, Washington, **March 14-15**, New York; **March 21-22**, Los Angeles; **April 11-12**, New York; **April 21-22**, Atlanta; **April 25-26**, Chicago: The American Management Association is presenting a corporate cash management seminar. For information call (518) 891-0065.

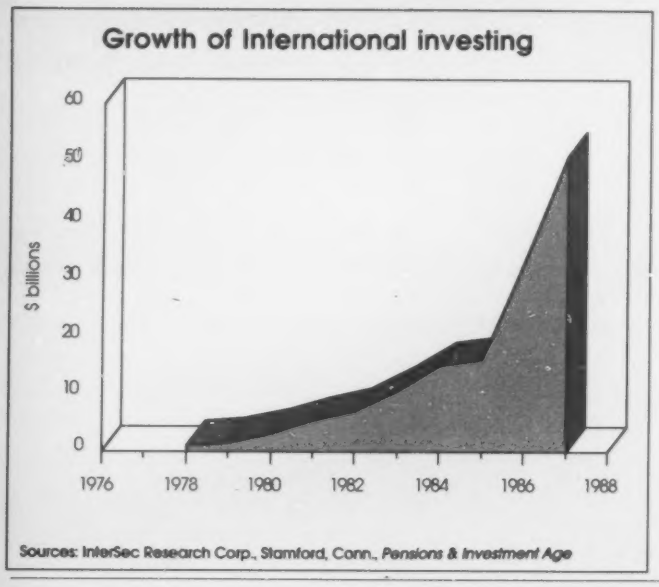
**Jan. 20-21**, San Francisco; **March 7-8**, Chicago; **April 25-26**, New York: The American Management Association is sponsoring "Advanced Treasury Management Strategies." For information call (518) 891-0065.

**Feb. 1-3**, New York; **March 9-11**, Chicago; **March 9-11**, Boston; **March 14-16**, Dallas; **April 13-15**, Philadelphia: The American Management Association is presenting "Credit Collection and Financial Management." For information call (518) 891-0065.

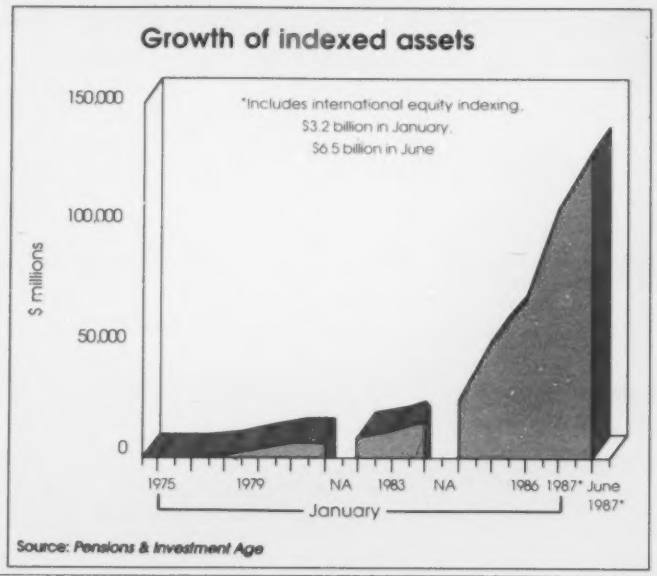
**Feb. 10**, Washington: The National Automated Clearing House Association is presenting "ACH Formats and Rules Seminar." For information contact Jody DeVoll at (202) 659-4343.

### CORPORATE FINANCE

**Jan. 20-21**, New York: "Private Placements: What's Behind the New Appeal" is sponsored by the Institute for International Research. For information call (212) 883-1770 or (800) 345-016.




Sources: InterSec Research Corp., Stamford, Conn., *Pensions & Investment Age*




Source: *Pensions & Investment Age*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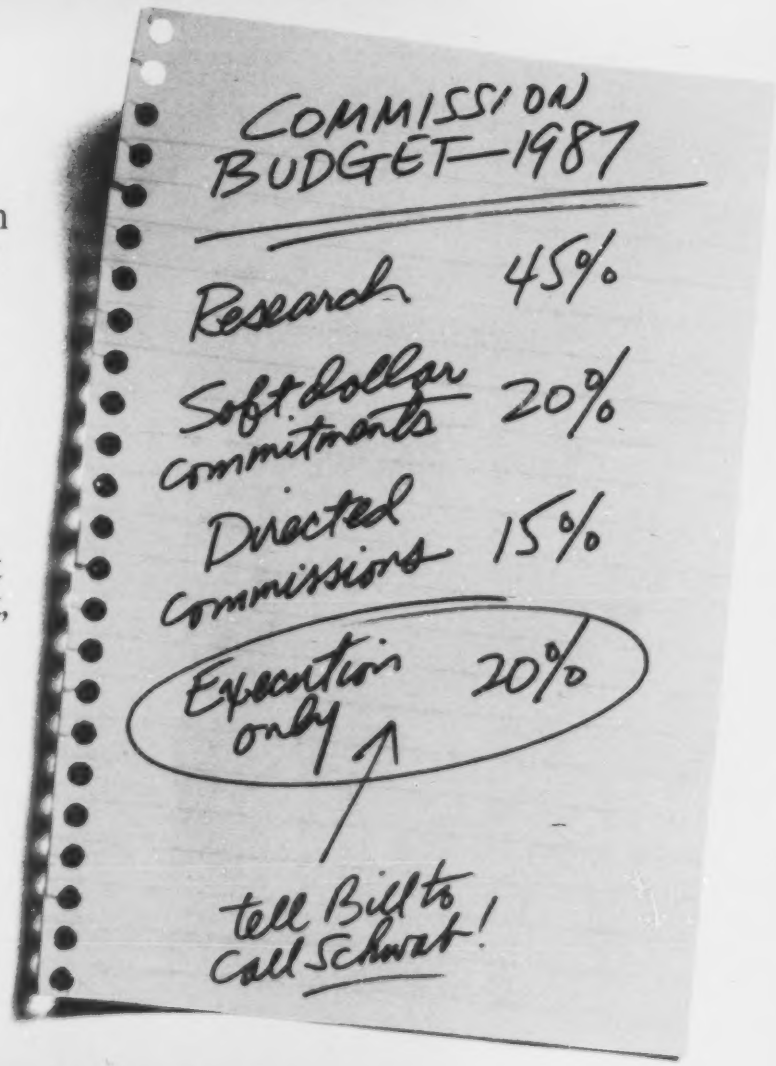


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## Letters

*Continued from page 8*

### Consultant omitted

To the Editor: I was disappointed to note The Townsend Group was not listed as a real estate consultant on your recent review of consulting services.

The Townsend Group is an institutional real estate consultant that exclusively services tax-exempt funds. We offer no other services or products. We address only the asset class of real estate and act solely in the consulting capacity.

Prior to addressing the needs of tax-exempt funds, the Townsend Group had provided real estate consulting services since 1983 to investment brokerage firms, Big Eight accounting firms, insurance companies and Fortune 500 companies. Using the experience developed addressing the needs of these knowledgeable and demanding clients, we now provide our services solely to the tax-exempt funds.

The principals of the firm, Kevin W. Lynch and myself, offer more than 25 years of "hands-on" real estate experience. We pride ourselves in the unmatched personalized service we have been able to offer our clients. We accept only a limited number of clients so we can afford each the necessary time and attention required to develop a successful real estate portfolio.

We work with our clients to develop appropriate real estate portfolios or to review their existing portfolios and suggest revisions. We then administer their plan. Encompassed in this process are a number of specific services, only some of which may apply to any one fund. The most commonly used services include: establishing objectives, policies and procedures; conducting an adviser search; preparing investment criteria; performing property specific due diligence; compiling periodic performance analysis; and implementing our proven systems, controls and programs.

We can be reached at The Townsend Group, 1419 W. Ninth St., Cleveland, Ohio 44113; (216) 781-9090.

Thank you for your kind attention to this matter.

**Terrance R. Ahern**
Principal
The Townsend Group
Cleveland

### Quantec not on list

To the Editor: The profile of Quantec/Quantitative Analysis Inc. was omitted from the Nov. 16 consultants directory. The profile is as follows:

Quantec/Quantitative Analysis Inc., 68 Laight St., New York, N.Y. 10013; (212) 925-7224.

Quantec provides systems for global asset allocation and portfolio risk analysis. Clients can use these systems to run active or passive portfolios in any of 18 different markets, and to manage global portfolios and currencey risk.

The firm has special expertise in applying quantitative investment techniques to global investments.

Quantec has 40 retainer clients and 15 non-retainer clients. Fees are payable in hard and soft dollars.

The client contacts are Jason MacQueen and Rosanne Pane.

**Rosanne Pane**
Quantec/Quantitative Analysis
New York

1,000 Largest Funds: Jan. 25

## 25 largest cash portfolios among Fortune 200 companies (as of Sept. 30)

| Company | 1987 ($ mils.) | 1986 ($ mils.) | % change '87 vs. '86 |
|---|---|---|---|
| Ford Motor | $9,128 | $8,123 | 12.4% |
| IBM | 6,753 | 7,920 | – 14.7 |
| Texaco | 4,176 | 3,189 | 31.0 |
| General Motors | 3,765 | 3,921 | – 4.0 |
| Atlantic Richfield | 3,596 | 3,662 | – 1.8 |
| Chevron | 3,556 | 3,203 | 11.0 |
| Boeing | 3,290 | 3,918 | – 16.0 |
| Exxon | 3,020 | 2,111 | 43.1 |
| AT&T | 2,910 | 2,148 | 35.5 |
| Sun Co.* | 2,455 | 2,150 | 14.2 |
| Chrysler | 2,405 | 3,169 | – 24.1 |
| General Electric | 2,300 | 1,385 | 66.1 |
| Digital Equipment | 2,175 | 2,043 | 6.5 |
| Hewlett Packard* | 2,114 | 1,230 | 71.9 |
| USX | 1,899 | 2,639 | – 28.0 |
| Coca-Cola | 1,627 | 1,816 | – 10.4 |
| Pepsico | 1,405 | 1,244 | 12.9 |
| Merck | 1,380 | 833 | 65.7 |
| Amoco | 1,361 | 772 | 76.3 |
| RJR Nabisco | 1,323 | 703 | 88.2 |
| Bristol-Myers* | 1,255 | 1,123 | 11.8 |
| Litton Industries | 1,230 | 1,516 | – 18.9 |
| Archer-Daniels-Midland | 1,221 | 774 | 57.8 |
| America Home Products | 1,097 | 736 | 49.0 |
| Rockwell International* | 1,048 | 730 | 43.6 |

* As of June 30
Source: Wright Investors' Service, Bridgeport, Conn.

# Shielding . . .

*Continued from page 2*

vestment returns from the cash portfolio offset the higher debt payments.

Because of advantages such as these, most corporations tend to take a conservative approach to investing their cash portfolios.

Even Ford Motor Co., Dearborn, Mich., with perhaps the largest cash position at $9.128 billion as of Sept. 30, tends to invest only in high-quality money market instruments, according to a company spokesman.

Typical of most corporate cash investment strategies is the set of guidelines used by AT&T. Mr. Reiss said the investment criteria are safety, liquidity and yield.

Some companies are becoming more aggressive in their approach to corporate cash investments.

"Given substantial investors, you can find the entire spectrum" of investment strategies, said Alan G. Seidner, president of The Alan G. Seidner Co., a consulting and investment firm in Pasadena, Calif.

On one end of the spectrum are the "simplistic" strategies, he said. "By simplistic, I mean they buy instruments that are very straightforward." These investments tend to be part of a buy-and-hold approach, he added.

"Looking at the other end of the spectrum, you have an institution that has either a large internal staff or hire outside advisers," Mr. Seidner said. These companies may use part of their cash portfolio for less traditional investments such as futures, options and equity-based programs.

Mr. Lyness said the company executives are considering inclusion of equity-based strategies, such as dividend capture programs, in the investment guidelines.

"Our cash is all in fixed income," he said. "But, we constantly are reviewing our guidelines to make sure they're appropriate because so many new products keep coming out."

Mr. Lyness also said the company uses four outside investment firms — Mercury Warburg Investment Management Ltd., Lombard Odier Investment Management Services Ltd., N.M. Rothschild Asset Management Ltd. and CSFB Investment Management Ltd., all in London — to invest about 5% of its cash portfolio.

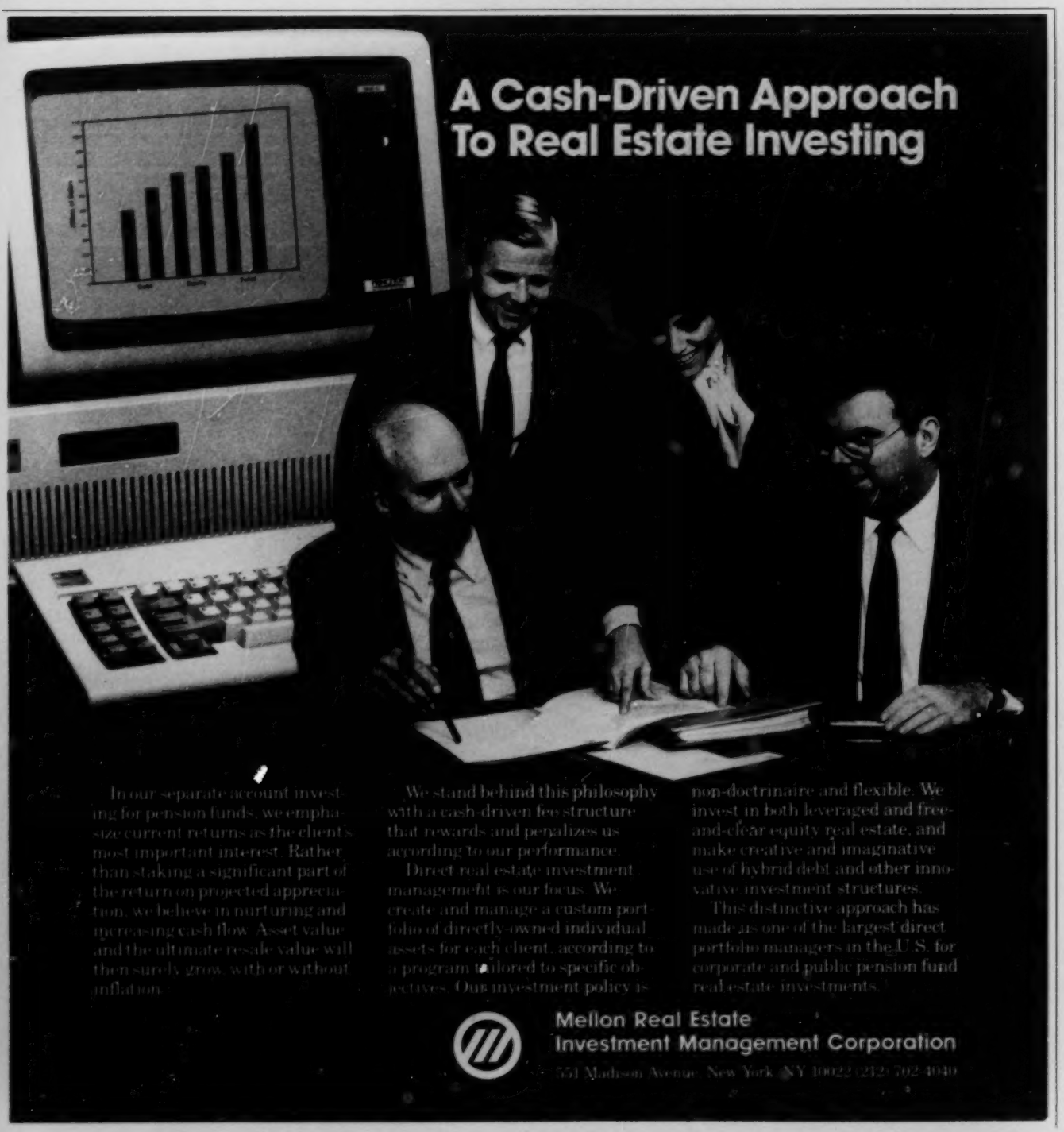
At Amoco, Mr. Murray said the company's domestic assets are invested conservatively because those funds are used for dividends, corporate taxes and other capital expenditures. The overseas assets, however, are invested more aggressively, he said.

"We have surplus funds (overseas) so we can use longer-term investments for yield enhancement. We have become active in the Eurocommercial paper market because of the yield enhancement possibilities," said Mr. Murray.

"It becomes not one monolithic cash pool, (but rather) it becomes 36 separate investment pools, both domestic and international, with different liquidity and yield requirements," he added.

Recent turbulence in the financial markets might have corporate cash investors rethinking some of their strategies.

Mr. Seidner noted many of the strategies, like index arbitrage, are based on the relationships between certain factors, such as the spread between the price of a futures contract to the underlying stock index. During the market's volatile periods, those relationships often broke down. "From my knowledge of the area I would have to say many of (these strategies) have been very disappointing and in fact costly," he said. ■



# New jobs coming in new year

Several pension industry executives will be taking leave of old jobs and facing new ones in 1988.

Leaving their positions are Robert W. Short of the New Mexico Educational Retirement Board, Santa Fe, and James A. Favia, president of Favia Hill & Associates, New York.

Taking on a new challenge is George Bruce, who has been appointed director of pension funds for the Vermont State Retirement Systems, Montpelier.

Mr. Short, investment officer of the internally managed $1.482 billion fund, will retire effective Feb. 1. No replacement has been named.

Mr. Favia is retiring from Favia Hill, the firm he helped establish as a wholly owned independent subsidiary of Chemical Bank in 1983.

He will remain with the firm until all of the accounts he manages can be transferred to a new senior equity portfolio manager, and will remain a member of the board, said Ken Dowd, managing director of Chemical Bank's Investment Group.

Mr. Dowd said Mr. Favia would help find the new portfolio manager.

Mr. Favia began his career with Chemical Bank in 1959 as an analyst and joined Kuhn Loeb in 1966, eventually becoming a partner and director of research. He rejoined Chemical in 1974 as research director.

In Montpelier, Mr. Bruce's appointment as well as that of Paul Ruse Jr., to the post of deputy state treasurer, follow the departure earlier this year of Edwin C. Gallison, the former deputy state treasurer who oversaw Vermont's pension fund investments.

The appointments were effective Dec. 1.

Mr. Bruce previously was a retiree adviser for the state; Mr. Ruse was city manager of Springfield, Vt.

Mr. Bruce will administer the $488 million Vermont State Retirement Systems, while Mr. Ruse will handle general treasury matters.

Mr. Gallison resigned earlier this year to become director of the $6 billion Arizona State Retirement System. ■

"THE ECONOMY IN THE FOURTH quarter has shown considerable momentum even after the market crash, so we enter '88 with pretty good conditions."

**Richard Rippe**

"THE DROP IN OIL PRICES HELPS keep inflation down, but it's not as important as the other aggregate factors."

**Lacy Hunt**

"PROGRESS IN THE BUDGET DEFICIT is vital to keep interest rates from going up, but since it's an election year you can't expect much progress there."

**Francis H. Schott**

# Slow growth seen . . .

*Continued from page 3*

rise in industrial commodity prices.

"The drop in oil prices helps keep inflation down," he said, "but it's not as important as the other aggregate factors."

On the other hand, Mr. Rutledge expects only modest inflation, 2.8% in the first half and 3.5% in the second half, while Deborah Johnson and Edward Yardeni, senior economist and chief economist, respectively, of Prudential-Bache Securities Inc., New York, expect 3.5% inflation in the first half and 4.5% in the second half.

"We're in a productivity pop," said Ms. Johnson. "In times of good productivity, you rarely have to worry about inflation."

**Deficits**

Most of the economists expect improvement in the trade deficit in 1988, and some expect dramatic improvement.

While the 1987 trade deficit is expected to be about $175 billion, all but three of the economists — Messrs. Dederick and Hunt, and Robert Chandross, vice president and chief economist of Lloyds Bank in North America, New York — expect an improvement of at least $20 billion.

Several expect more significant improvements. Donald Straszeim, chief economist at Merrill Lynch Pierce Fenner & Smith Inc., New York, expects the trade deficit to decline to $124 billion, while PruBache's Ms. Johnson and Butcher & Singer's Mr. Brown expect it to drop to $100 billion.

However, the economists generally expect a slight worsening of the federal budget deficit, with all but one of the projections falling between $155 billion and $180 billion compared with about $150 billion for fiscal 1987.

"Progress in the budget deficit is vital to keep interest rates from going up, but since it's an election year you can't expect much progress there," said Frank Schott, senior vice president and chief economist at The Equitable Life Assurance Society, New York.

A number of the economists also expressed concern the Federal Reserve Board could clamp down on the money supply and induce a recession after the 1988 elections. ■

*This article was written by Michael J. Clowes based on reports by Joel Chernoff, John Covaleski and Trudy Ring.*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# Budget law . . .

*Continued from page 1*

will become liable to the PBGC for the full amount of unfunded, guaranteed benefits, as well as become liable for additional benefits owed to plan participants.

- Special transition rules for the steel industry and allowance for case-by-case relief from the IRS for companies with special problems will ease compliance with the tougher minimum funding rules. Under the law, the steel companies will not have to improve their funded status by more than 1% for each of the first five years.
- The annual premium paid by employers to the PBGC will convert to a variable-rate basis. The base rate will nearly double to $16 from $8.50, but now a variable component of $6 per $1,000 in underfunding will be added, up to a maximum premium of $50 per participant.

The premium increase becomes effective Jan. 1, while the funding provisions become effective Jan. 1, 1989.

The package is a compromise worked out earlier this month among the four bills passed by the tax-writing and labor committees of the House and Senate.

Administration officials praised the bill, which included much of what the PBGC and Department of Labor had wanted.

"It will significantly enhance both the retirement security of American workers and retirees and the long-term financial integrity of the PBGC," said David M. Walker, assistant secretary of labor. "While it doesn't include everything we wanted, it does include everything we need."

"We think these are fundamental reforms that will go a long way to stabilize the system," said Kathleen P. Utgoff, PBGC executive director.

Ms. Utgoff said she believes the funding rules will work well for most employers and will target the ones who need improvement the most in a moderate way. The PBGC has a nearly $4 billion deficit, much of which is because of terminations — particularly of steel company plans. It has been lobbying for higher premiums and stronger funding to protect itself from further problems.

But some business and labor experts had problems with some rules.

The loss of deductibility for contributions when a plan's funding exceeds 150% combined with harsher minimum funding rules "will drive everyone crazy," said Sol Weinberger, managing partner at William M. Mercer-Meidinger-Hansen Inc., New York.

Corporations' ability to manage budgeting and forecasting will be impaired, because contributions will become more subject to trigger points, he said.

In addition, the shorter amortization rules for past-service liabilities will cost employers more in the short term to fund benefit increases. "I think this is a serious threat to future retirees getting cost-of-living-adjustments," said Richard Raskin, consulting actuary at The Wyatt Co., New York.

Another problem is that newly required quarterly payments on plan contributions will have to be estimated for many plans. If a subsequent valuation shows the plan to exceed the 150% funding limit, the employer could lose the deductibility for the contribution and be slapped with a 10% excise tax, said Ethan Kra, a principal at Mercer-Meidinger.

Other issues resolved in the final legislation include:

- Plans that are less than 60% funded would have to post a surety bond before they can vote any increase in benefits. Under a House Ways and Means proposal that did not reach the final bill, the PBGC would have been given a security lien on any company whose plan was less than 70% funded.
- A pension-portability provision was dropped.
- Floor offset plans set up after Dec. 17 must comply with the 10% limit on employer stock in both the defined benefit and defined contribution segments of the plan.
- A set of takeover-related taxes that threatened to bring corporate mergers and takeovers to a halt were dropped except for a 50% tax on "greenmail" profits payable only if the greenmailer gets a better price from the company for his stock than the other shareholders. ■

# Thrift board picks Wells

WASHINGTON — The Federal Retirement Thrift Investment Board has hired Wells Fargo Bank San Francisco, to manage a stock index fund and a bond index fund.

The $1.4 billion fund, established in April, was created to offer federal employees a tax-deferred savings plan. It has the potential to grow explosively during the next decade.

The other investment option participants may choose is a fund investing in U.S. government securities. ■

E2710-2

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January 11, 1988

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# Bondholders slam deal

By Marcia Parker

A group of convertible securities investors is threatening to block a $152.5 million friendly takeover of Wherehouse Entertainment Inc. unless convertible investors are guaranteed of reaping the rewards of the merger, not piling up losses.

The group is led by Froley, Revy Investment Co. Inc., a Los Angeles money manager. Like other convertible investors, Froley, Revy, which owns more than $8 million of Wherehouse Entertainment's 6¼% convertible subordinated debentures due 2006, stands to lose money on the Wherehouse deal because the tendering price for the convertibles is almost half the $27.60-per-share conversion price.

The investment management firm might take legal or other action to challenge the merger, according to Thomas Revy, managing director. Executives at Wherehouse and Adler & Shaykin, the private New York investment firm that would take over Wherehouse, declined to comment other than to say through a spokesman they don't believe the convertible debenture holders have a case.

The board of directors of Wherehouse, a specialty retailer of home entertainment and information software, approved a merger agreement with Adler & Shaykin late last month. Under the agreement, WEI Holdings Inc., a company formed by Adler & Shaykin, will acquire Wherehouse for $14 per share in cash. The Adler & Shaykin tender offer expires Jan. 22, although it may be extended.

Wherehouse's board agreed to the Adler & Shaykin offer after rejecting an unwelcomed advance from Shamrock Holdings Inc., which commenced a $12-per-share offer for Wherehouse shares in November.

Until now, major investors in convertible securities — fed up with losing millions of dollars on conversion rights in some takeovers and restructurings — tried to sweet talk issuers and Wall Street underwriters into putting protective clauses in the indentures of new convertible issues guaranteeing convertible investors a fair return on their investments (*Pensions & Investment Age*, July 27).

But they've only succeeded in getting a few issuers and underwriters to include the special wording.

Now some convertible investors are getting more militant. Led by Froley, Revy, the investors are choosing specific takeover battles to air their cases and pushing for a legislative solution that would ensure the kind of rights common stockholders have long enjoyed.

"We hope to catch the attention of the Securities and Exchange Commission," Mr. Revy said of his drive to secure more equitable treatment of convertible investors. "The SEC seems

*Continued on page 34*

# Street financing to drop in 1988

By Marcia Parker

NEW YORK — Corporate America's coffers will be brimming over in 1988, bolstered by a $30 billion-plus increase in internal cash flow that will lessen its need to tap external financing sources, Salomon Brothers Inc. predicts.

The investment bank's annual report on the prospects for the financial markets says reduced liquidity requirements are likely to push corporate external financing needs to less than $60 billion — just below the 1987 level.

That forecast has negative implications for already struggling Wall Street firms and the corporate finance wizards who help companies raise money. Even the most venerable Wall Street investment banks have been cutting jobs to reflect the realities of the post-Black Monday market.

Meantime, the sharp erosion of pension surpluses since Black Monday also will affect corporate earnings and balance sheets, and suggests pension plans could be net sellers of stock in 1988, Salomon said.

Private funds are expected to accelerate their net liquidation of stocks to more than $30 billion in 1988 from about $19 billion in 1987.

But Salomon Brothers said that, as has been true for the past few years, the activity on the pension side of the corporation may be overwhelmed by companies' buying stock for their own account via repurchases or acquisitions. Equity retirements will far surpass new equity offerings.

Corporate external financing needs will be relatively low this year for several reasons, the investment bank said.

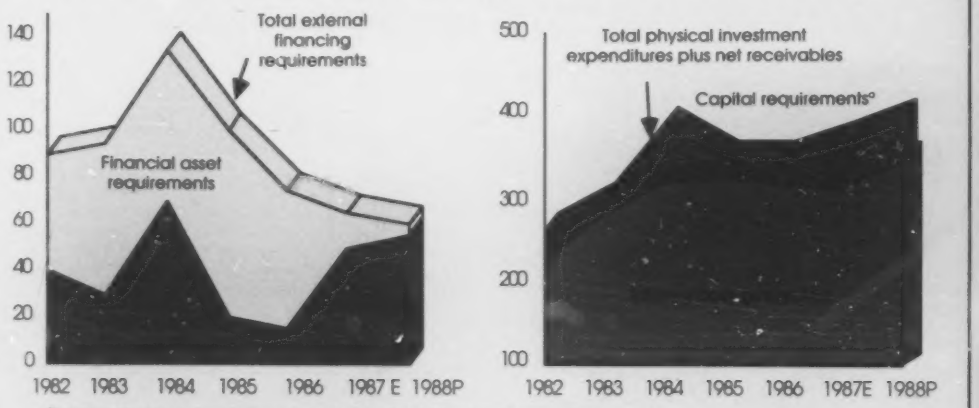
Gains in the export sector, along with higher rates of inflation and the ongoing benefits of cost-cutting efforts, will boost pre-tax corporate profits, Salomon Brothers said.

Nevertheless, Salomon Brothers looks for a modest pickup in net equity retirements to $60 billion in 1988 from $52 billion in 1987, which will keep debt financing comparatively high. The investment bank anticipates continued lofty levels of mergers and leveraged buy-outs, an increase in repurchase programs and a decline in new stock offerings and conversions.

As the yield curve begins to steepen in the spring, Salomon Brothers expects corporations to further shorten the maturi-

*Continued on page 33*

**Net financing needs of non-financial business corporations ($ billions)**




*Total physical investments plus net receivables less internal cash generation

Source: Salomon Brothers Inc., New York

INSIDE

**Currency blues — P. 27**

The current foreign exchange market is making it tough on proponents of currency management, a technique used in international investing that experts say can preserve and add value to international portfolios.

**Contract hoopla — P. 13**

Backers of the U.S. Dollar Index future contract — touted as a great alternative to currency-by-currency hedging — are looking for commitments from tax-exempt investors to make it more popular and push it into orbit.

# A $10 billion makeover

## California Employees remodeling passive equities

By Chuck Paustian

SACRAMENTO, Calif. — The $44 billion California Public Employees' Retirement System is restructuring about $10 billion to $12 billion of internally managed equity assets, eliminating a $5.5 billion equity index fund and creating 13 separate portfolios.

All of the fund's in-house equity assets will be allocated among six core portfolios, six active portfolios and a South Africa portfolio. All the portfolios will be internally managed.

"It's something we've had in the planning stages for some time," said Greta E. Marshall, investment manager at the retirement system, the nation's second largest. "We delayed implementing it last year because we were converting to a master custodian and we preferred to complete that conversion first."

Wilshire Associates, Santa Monica, Calif., provided data to help with the restructuring. The fund's seven external equity managers, which manage between $4 billion and $5

*Continued on page 33*

## LATE NEWS

### Hitchman leaving Washington

OLYMPIA, Wash. — John A. Hitchman, executive director of the $13 billion Washington State Investment Board, will resign effective the end of March and join one of the board's equity managers, Los Angeles-based Hotchkis and Wiley.

"I certainly feel satisfied in my present employment," he said. "It's just that I think Hotchkis and Wiley is an excellent firm and there's a lot of opportunity there."

Although his title at Hotchkis and Wiley was not determined, Mr. Hitchman said he will work with the firm's partners in investing the more than $2.4 billion under management. Hotchkis and Wiley runs about $160 million for the Washington investment board.

Officials of the Washington investment board have selected a panel to find a replacement for Mr. Hitchman, but a timetable hasn't been set.

### Mitchell Hutchins buys MHIC

NEW YORK — Mitchell Hutchins Asset Management Inc., PaineWebber Inc.'s money management affiliate, has acquired Manufacturers Hanover Investment Corp., an institutional investment management subsidiary of Manufacturers Hanover Corp., for $27 million.

MHIC, which is based in New York, manages about $22 billion of institutional assets and is a leading manager of institutional money. Mitchell Hutchins, also headquartered in New York, manages about $16 billion in assets. It is strong in mutual funds and accounts for high net worth individuals.

"We don't have a large institutional business and this will give us that presence. We wanted to build a major full scale asset management firm," said Cheryl K. Gruetzmacher, managing director of institutional asset management for Mitchell Hutchins.

Manufacturers Hanover said in a statement the investment management subsidiary "had become peripheral to its strategic thrust since there was little linkage between MHIC's domestic business and other units of the parent."

### Pope quits AMR to join United

FORT WORTH, Texas — John C. Pope, senior vice president-finance and chief financial officer of AMR Corp., has resigned to become executive vice president-finance and chief financial officer at rival United Airlines, Chicago.

AMR Corp. is the parent company for American Airlines.

An AMR spokesman said most of Mr. Pope's duties will be assumed by Donald J. Carty, now senior vice president-airline planning, who will become senior vice president-finance and planning.

### Funds fighting takeover law

WASHINGTON — At least four of the nation's largest pension funds have teamed up with shareholder rights groups to sponsor a media blitz aimed at defeating the anti-takeover bill scheduled for consideration by the Delaware State Assembly this month.

Among the funds joining forces with the Washington-based groups — Institutional Shareholder Services and United Shareholders Association — are the $40 billion California Public

*Continued on page 34*

## HIGHLIGHTS

### Financial wizardry in '87 — P. 21

Wall Street conjured up some financial magic for clients such as General Electric Credit Corp. (now General Electric Capital Corp.), above, in 1987. *Pensions & Investment Age* takes a look at the best deals pulled from the hats of Street magicians.

## DEPARTMENTS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Vol. 16, No. 1 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1988

# Law may speed stock pull-back

By Nicky Robertshaw

WASHINGTON — Corporations, already shaken by the Oct. 19 market plunge and attempting to adjust to new pension accounting rules, have been given additional strong incentives to pull their pension assets from the stock market by the budget act passed by Congress last month.

The combined effect of new pension rules incorporated in the budget act and the pension accounting rules of the Financial Accounting Standards Board Statement 87 is likely to drive corporations to greater use of bond and hedged strategies.

Title IX of the Omnibus Budget Reconciliation Act of 1987, enacted last month, "will provide simply one more Pavlovian incentive to take a look at the asset-liability ratio," said Eric P. Lofgren, a principal in the New York office of William M. Mercer-Meidinger-Hansen Inc. "I don't think plan sponsors will throw away long-term growth, but they will try to find a compromise between long-term growth and preserving the asset-liability ratio."

"A few years ago you could keep cash flow pretty stable," said Lawrence N. Bader, a vice president at Salomon Brothers Inc., New York. But FASB 87 "changes the stability of expenses by requiring sponsors to discount the liability at market interest rates. Now, with (budget reconciliation), you upset the stability of contributions — at least with plans at the two ends (of the fundedness scale). For moderately well-funded plans, you tighten the boundaries."

"The direction Congress is going, not only with this but with the Tax Reform Act of 1986 and others, is to make more narrow the acceptable range of funding for plans," said Kenneth W. Porter, chief actuary of E.I. du Pont de Nemours & Co., Wilmington, Del. He added this could have a volatile effect on cash flow.

"It seems to me that this new law has more of an effect on funding than on cash flow," agreed Robert E. Angelica, director of pensions and investments, American Telephone & Telegraph Co., New York, who noted he had not yet studied it.

He added the law could cut down on management's ability to build up a cushion against adverse market experience and other future developments "by cutting tighter corners."

Because the new law sets 30-year Treasury bond interest rates as the "moving target" that will cause fluctuation in the asset-liability ratio, pension funds eventually will move more toward fixed-income investments.

Sponsors of underfunded plans particularly are affected because financially troubled companies might not be able to afford the stiffer monetary requirements that would accompany dips in their funding status. Such funds eventually would have to stay away from the more volatile equity markets, Mr. Lofgren said.

Among investment instruments thought to become more popular in light of the recent developments:

- Dollar-duration immunized portfolios, such as that implemented by American Airlines (*Pensions & Investment Age*, March 9). Under this arrangement, a company can cover its pension liabilities by investing less than half of its assets in a bond portfolio of longer duration than the liabilities.
- Hedges against large stock market losses — both existing methods such as portfolio insurance and new devices that might be developed. Mr. Lofgren, who describes himself as a longtime foe of portfolio insurance, sees it as favorable if used wisely. He believes the market crash has thinned the number of users —

*Continued on page 34*

# Asset mix is key issue

By Chuck Paustian

Pension fund executives are paying more attention to asset allocation than any other topic, trying to deal with the increased volatility of the financial markets.

An informal survey of investment consulting firms found asset allocation to be the most frequent topic of discussion with their clients.

"The October decline and the November decline have reinforced the importance of having the (asset allocation) structure right," said William F. Brock, director of consulting at Evaluation Associates Inc., Norwalk, Conn.

The Financial Accounting Standards Board Statement 87 and various investment strategies geared toward its implementation also are hot topics, the consultants said.

Sandy Lincoln, managing director of asset planning services for William M. Mercer-Meidinger-Hansen Inc., Deerfield, Ill., noted two reasons for the current emphasis on asset allocation.

"First and probably foremost is the volatility of the markets," Mr. Lincoln said. "People are seeing a tremendous amount of volatility in the stock and bond market both, and people are asking, 'What can we do to protect ourselves?' "

He also said FASB 87, which will require corporations to note the funded status of their pension funds on the balance sheet, has corporate pension executives looking at asset allocation to protect or improve the relationship between assets and liabilities.

"It has focused the plan sponsors on the level where they can make the biggest impact, which is asset allocation," he said.

The goal of the allocation studies, the consultants said, has been to examine how well the asset mix served the pension fund, rather than to analyze the performance of particular asset classes.

"We're really focusing more on this question of the risk of the underlying asset classes and how this will impact asset allocation in the future," said Lawrence E. Davanzo, senior president of Wilshire Associates, Santa Monica, Calif.

"It's more evolutionary in regard to structure as opposed to reactionary as in looking for a quick fix and preparing for the next crisis," said Mr. Brock.

Corporate executives also face the dilemma of trying to maximize investment returns while mitigating fluctuations in pension expense resulting from adjusting the market values of a pension plan's assets and liabilities.

"If anything, the emerging solutions (to this problem) seem to favor bonds," said Ronald J. Surz, a principal of Becker, Burke Associates Inc., Chicago. The idea, he said, is the value of the fixed-income assets will increase or decrease in concert with the plan's liabilities as interest rates change.

Mr. Surz added, however, "Bonds have been getting

*Continued on page 34*

# Highs, lows of market is top story

The boom-and-bust stock market of 1987 was the most significant finance story of the year, according to *Pensions & Investment Age* readers.

Predictably, the gyrating market was ranked among the top five stories by almost 78% of the voters.

Readers were asked in the Nov. 30 issue to rank — from 18 choices — the five most important financial news stories of the year. The responses were tabulated by awarding five points to the top-ranked story, four points to the second-ranked one and so forth.

The stock market —which last year marked the fifth anniversary of a bull run, a record high and a record one-day drop — easily swept the vote.

Japanese investment was deemed the second most important story of the year, being named by almost 52% of the respondents.

Last year, Japanese investors poured billions of dollars into the U.S. stock and equity real estate markets, while for the first time, U.S. investment institutions tapped into $16 billion in Japanese assets, through individual efforts and joint ventures with Japanese firms.

The Financial Accounting Standards Board's Statement 87 and corporate strategy "integration" brought increased scrutiny to pension fund assets and liabilities, making the asset/liability issue the third most important story to *P&I Age*'s readers, showing up on 37% of their ballots. (FASB 87 requires pension liabilities to be shown on a corporation's balance sheet.)

Although the growth of the nation's pension surplus did not make it into the the top five stories, the dispute over who is entitled to those surplus assets did, ranking fourth in points

*Continued on page 33*

# Modest growth for indexing

By Trudy Ring

Indexing continued to grow, albeit at a modest rate, in the six months ended Nov. 30.

Domestic stock index funds run by 29 major managers had a net gain in assets under management of 5.5% in the period, while domestic bond index funds had a net gain of 1.9%. International stock index funds had a net gain of 4.2%.

The figures are based on the indexed assets of management firms that provided *Pensions & Investment Age* with information for both May 30 and Nov. 30 and reflect adjustment for market gain or loss.

"Net/net, we've seen much more inflow than we have outflow in our index funds," said Carol Zipkin, senior vice president of Alliance Capital Management Corp., New York.

"We've seen more contributions come into our index funds than go out, but nothing dramatic," said Steve Krisik, vice president of Northern Trust Co., Chicago.

Indexers hope to benefit further after plan sponsor committees review their asset allocations and managers' results in the wake of the October stock market decline.

Preliminary statistics from at least one consultant might boost those hopes.

According to unpublished data compiled for clients by Wilshire Associates, Santa Monica, Calif., active equity managers underperformed the stock market during the month of October and the 10 months ended Oct. 31, and value managers failed to add much value in the down market. If fourth-quarter 1987 returns — which for the most part won't be available until the end of this month — reinforce those findings, more sponsors might opt for indexed funds.

"What happens is people typically have a flurry of activity — making reports, meeting with committees," said Bill Fouse, chairman of Mellon Capital Management Corp., San Francisco. That process takes a few months, he said. "But the repercussions will start to be seen as early as March."

Included among the 29 managers providing information for both Nov. 30 and May 30 was $98.3 billion in domestic stock index funds, $40.7 billion in domestic bond index funds and $5.7 billion in international stock index funds as of Nov. 30.

As of May 30, those managers had $115.6 billion in stock index funds, $38.9 billion in bond index funds and $6.2 billion in international index funds. Those numbers were then adjusted by major market indexes for comparison with the Nov. 30 figures.

During the six months, the Standard & Poor's 500 stock index declined 19.4%, the Shearson Lehman Government/Corporate bond index gained 2.6% and the Morgan Stanley Capital International Europe, Australia, Far East index declined 11.7%.

Overall, as of Nov. 30, 37 managers interviewed by *Pensions & Investment Age* had $161.3 billion worth of index funds under management. That included $107.4 billion in domestic equities, $43.7 billion in domestic bonds and $5.8 billion in international, almost exclusively equities. The total includes some indexed strategies that are not pure equity or fixed income, such as tactical asset allocation.

Six months earlier, 42 managers surveyed by *P&I Age* had $190 billion in index funds, including $126.3 billion in domestic equities, $43.5 billion in domestic bonds and $6.6 billion in international.

In addition to the index funds run by money managers, there were $65.7 billion worth of index funds run in-house by the nation's top 200 pension funds as of Sept. 30. This is composed of $63.4 billion in stock index funds and $2.3 billion in bond index funds. Nov. 30 figures were not available but, using market performance, *P&I Age* estimates the stock funds would have stood at $52.9 billion and bond funds would have been $2.35 billion. In the two months, the S&P 500 was down 28% and the Shearson Lehman index was up 4.4%.

Indexing has surged in the past few years because of the tendency of active managers to underperform broad market indexes and because of its lower management fees. But some say it's too soon to tell whether the October market plunge will produce another surge.

"Between the 19th (of October) and the end of the year, you're finding pension sponsors re-evaluating what types of strategies they want to be involved with," said Scott Malpass, index fund manager at Irving Trust Co., New York. Many pension executives believe active management does better in down markets and indexing in up ones, but they may not be ready to predict which way the stock market will go, he said.

If pension executives are disappointed by their active managers' year-end results, it's highly likely there will be increased interest in indexing, said Jim Carder, presi-

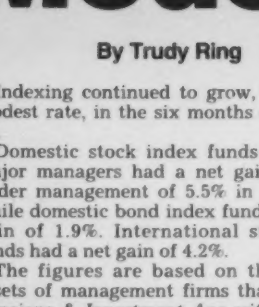
*Continued on page 31*

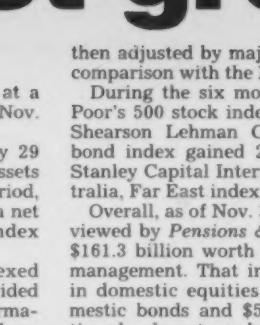
## Top index fund managers

($ millions as of 11/30/87)

| | Total indexed | Domestic equity | Domestic fixed | International |
|---|---|---|---|---|
| Wells Fargo Investment Advisors | 50,600 | 35,000 | 10,500 | 761 |
| Bankers Trust | 23,300 | 20,250 | 2,750 | 250 |
| Mellon Capital Mgmt. | 18,043 | 14,745 | 2,780 | 148 |
| State Street Bank & Trust | 13,690 | 8,010 | 1,980 | 3,190 |
| American Nat'l Bank[1] | 9,550 | 8,250 | 1,200 | 100 |
| Manufacturers Hanover Investment | 7,136 | 236 | 6,900 | 0 |
| Mellon Bond Associates | 5,900 | 0 | 5,900 | 0 |
| Alliance Capital Mgmt. | 4,007 | 3,707 | 50 | 250 |
| Dimensional Fund Advisors | 3,057 | 2,888 | 0 | 169 |
| Chase Investors Mgmt. | 2,975 | 1,225 | 1,400 | 350 |
| Manufacturers Nat'l Bank of Detroit | 2,841 | 2,811 | 30 | 0 |
| Boston Co. | 2,225 | 1,925 | 150 | 150 |
| Wilshire Associates | 2,200 | 2,200 | 0 | 0 |
| Lehman Mgmt. | 2,169 | 0 | 2,169 | 0 |
| T. Rowe Price Associates | 2,100 | 500 | 1,600 | 0 |
| Putnam Advisory | 1,700 | 0 | 1,700 | 0 |
| Prudential | 1,634 | 588 | 773 | 273 |
| Lincoln Capital Mgmt. | 1,500 | 0 | 1,500 | 0 |
| The Vanguard Group | 957 | 917 | 40 | 0 |
| WR Lazard[2] | 903 | 0 | 903 | 0 |
| Northern Trust | 892 | 713 | 159 | 20 |
| Harris Trust and Savings Bank | 735 | 435 | 300 | 0 |
| Citicorp | 640 | 640 | 0 | 0 |
| First RepublicBank Dallas | 610 | 560 | 50 | 0 |
| Security Capital Mgmt. | 580 | 0 | 580 | 0 |
| Axe Core Investors | 505 | 400 | 0 | 105 |
| ASB Capital Mgmt. | 379 | 379 | 0 | 0 |
| Centerre Trust | 290 | 290 | 0 | 0 |
| First Wisconsin Trust | 211 | 87 | 124 | 0 |
| Metropolitan Life | 207 | 207 | 0 | 0 |
| Travelers | 204 | 136 | 15 | 53 |
| National Bank of Detroit | 155 | 155 | 0 | 0 |
| Irving Trust | 150 | 100 | 50 | 0 |
| Westridge Capital Mgmt. | 100 | 100 | 0 | 0 |
| County Investment | 80 | 0 | 0 | 80 |
| Western Asset Mgmt. | 78 | 0 | 78 | 0 |
| Seattle First Nat'l Bank | 60 | 0 | 60 | 0 |
| TOTAL | 161,363 | 107,454 | 43,741 | 5,899 |

[1] As of 3/1/87. [2] $765 million is managed by consortium of WR Lazard and Smith Barney Harris Upham





**Michael Petrino of Matrix Capital, left, says the January effect cannot occur without other economic fundamentals, but William Fouse of Mellon Capital feels reasonably sure the phenomenon will occur.**

# *Timers returning to equity market*

By Marlene Givant

Managers implementing market-timing strategies generally have increased their equity exposure since October, but few have done so to benefit from the so-called January effect.

Although managers believe the phenomenon — in which small-capitalization stocks outperform others early in the year — will be borne out, most didn't want to chase the quick uptrend.

"The January effect doesn't show enough times to bet on it in and of itself. You need economic fundamentals to support a rally as well. There has been no January effect in three of the last seven years," said Michael Petrino, president of Matrix Capital Management, Greenwich, Conn.

As for broader strategies, managers interviewed were fairly bullish on stocks. Port-

*Continued on page 32*

# Unisys plan unveiled

## Merged fund may up alternative investments

By Jacqueline Dutton

BLUE BELL, Pa. — The new Unisys Corp. pension plan, constructed with more flexibility than its predecessors, likely will increase its investments in international, venture capital and real estate.

Unisys' approximately $2.6 billion in employee benefit funds officially will replace those of the former Burroughs Corp. and Sperry Corp. April 1. Unisys is the company formed from the acquisition of Sperry by Burroughs in 1986.

The defined benefit plans' investment policy evolved from the implementation of core decisions: to give the new plan the best features of the old ones; to terminate underperforming or unnecessary managers; and to make the new plan adaptable to strategic changes.

That was the solution arrived at by David White, former Burroughs pension executive and now Unisys vice president of capital management, and his Unisys colleagues, who had the awesome task of consolidating assets of two very differently managed plans into one.

"The program doesn't look like either the Burroughs or the Sperry plan," Mr. White said.

Instead, it has a combination of features, although it more closely resembles the old Burroughs plan in terms of asset allocation and managers. (More than $1 billion of the Sperry plan was in an internally managed balanced account with the now-defunct Sperry Capital Management Co.)

The Unisys plan won't use any balanced managers, but it will, like the Sperry plan, be exposed to international equity and guaranteed investment contracts, and to real estate and venture capital, distinct features of the Burroughs plan.

In fact, international equity likely will compose a greater percentage of total equities in the future. Now, the fund invests roughly $173 million in foreign stocks, an amount carried over from the Sperry plan.

"On our table for '88 is a review of the international sector and its managers," Mr. White said. "We have no cause for concern because they are doing really well," he said.

New strategies, such as currency allocation, also will be considered.

The same consideration will be given for real estate, which was part of the Burroughs plan but not the Sperry plan. Although the current exposure is only 4% of total assets, Mr. White said the target is 15%.

The fund also has displayed a growing interest in the venture capital area; during the fall it hired leveraged buy-out specialist Blackstone Group, a New York Merchant Bank, to invest a $25 million commitment and signing Ventures Trident to invest another $10 million in other ventures, moves which more than doubled total venture capital exposure.

Abbott Capital Management, Wellesley Hills, Mass., which had been a Burroughs' manager, invests $40 million for Unisys in 11 venture capital partnerships. Mr. White said more assets could be moved into venture capital to move total portfolio weighting from the current 2% to the targeted 5%.

Early last summer, Unisys completed its reallocation of the funds managed by Sperry Capital to several managers. Equity manag-

*Continued on page 34*

FINANCING

# Underwriting volume dips

By Brad Rudin

NEW YORK — While underwriting volume in 1987 dropped below the bullish levels established in 1986, Salomon Brothers Inc. maintained its lead as the top underwriter in the public domestic market and First Boston/Credit Suisse First Boston continued as No. 1 in the public global market.

Volume figures for most sectors declined, the victim of uncertainty created by the Oct. 19 stock market fall.

In the global market, volume shrank 12% to $432.7 billion from $491.6 billion in 1986, according to Securities Data Co., New York. Domestic volume slid 5.1% to $271.5 billion in 1987 from $286 billion the year before, according to IDD Information Services Inc., New York. The decline is bigger if mortgage-related and agency issues are removed from the domestic total. Calculated this way, the volume of corporate finance underwritings dropped 11.4% to $144.8 billion from $163.4 billion in 1986.

Mortgage-related securities moved against the tide with a 40% increase in underwriting volume.

The mortgage-related market has been helped by investors' "flight to quality" and Wall Street's efforts to educate buyers about the securities, said Chuck Ramsey, a managing director in the mortgage-related unit at Bear, Stearns & Co.

Potential for continued growth exists, Mr. Ramsey said. "If you're talking about what hasn't been securitized, you're talking about trillions out there. It's a marketplace that's immense, gigantic."

The outlook for total volume remains clouded by slow economic growth, a steep yield curve, the quiet Euromarket and the completion of some major financings, said C. William Schroth, a managing director at First Boston. "I think the market as a whole is going to have a tough time equaling 1987 volume in 1988."

That's not good news for Wall Street firms struggling with costs that became part of the budget when the volume of business seemed permanently fixed in a northerly direction.

The volume of common stock financings sank 4.7% to $41 billion from $43 billion in 1986 while the value of high-yield debt offerings fell 10.8% to $28.9 billion in 1987 from $32.4 billion the previous year.

The volume of asset-backed securities increased 3% to $10.3 billion in 1987 from $10 billion the previous year.

For the first time in several years, investment bankers competed in a shrinking market.

"It's been a highly competitive year," said Jason M. Elsas Jr., head of the syndicate department at Salomon. He said ranking No. 1 in domestic underwritings, an honor Salomon has held for five years, has one caveat: "It's a top priority as long as the business is conducted with an eye toward profitability."

Its role as lead manager for such big equity offerings as E-II Holdings Inc. and Carnival Cruise Lines Inc., and bigger debt offerings for the Federal National Mortgage Association and several trusts made Salomon the top-ranked underwriter in the domestic market.

First Boston, with its London-based affiliate, Credit Suisse First Boston, kept its hold on first in worldwide underwritings for the third year running because of the firm's thorough coverage of its clients and involvement in the major sectors of the capital markets, said First Boston's Mr. Schroth.

First Boston made it to the top in worldwide volume with a big debt offering for Allied Stores Corp. and issues backed by mortgages and other assets.

Although Salomon is a powerhouse in the investment-grade debt and mortgage-related debt businesses, the firm ranks below First Boston in the common stock, preferred stock, high-yield debt and asset-backed segments of the market.

The gap between First Boston and Salomon Brothers narrowed in the domestic and global rankings. Salomon held a 14% domestic market share in 1987 compared with the 13.5% share held by First Boston, but in 1986, Salomon took 17.9% of the business vs. First Boston's 15.4%, according to IDD.

## 1987 underwriting rankings
## (Full credit to lead manager)

### All issues - global*

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. CSFB† | 46,316.4 | 10.7 |
| 2. Salomon Brothers | 44,733.7 | 10.3 |
| 3. Goldman, Sachs | 35,826.4 | 8.3 |
| 4. Merrill Lynch | 35,310.5 | 8.2 |
| 5. Morgan Stanley | 34,967.6 | 8.1 |
| 6. Drexel Burnham | 21,438.4 | 5.0 |
| 7. Shearson Lehman | 21,306.3 | 4.9 |
| 8. Nomura | 19,388.5 | 4.5 |
| 9. Kidder Peabody | 10,578.8 | 2.4 |
| 10. Daiwa | 8,752.1 | 2.0 |

* all taxable issues, debt and equity, worldwide
† First Boston/Credit Suisse First Boston
Source: Securities Data Co., New York/Euromoney Publications, London

### All issues - domestic*

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Salomon Brothers | 40,284.5 | 14.8 |
| 2. First Boston | 36,628.1 | 13.5 |
| 3. Merrill Lynch | 33,420.4 | 12.3 |
| 4. Goldman, Sachs | 32,295.8 | 11.9 |
| 5. Morgan Stanley | 29,887.0 | 11.0 |
| 6. Drexel Burnham | 21,132.7 | 7.8 |
| 7. Shearson Lehman | 19,701.2 | 7.3 |
| 8. Kidder, Peabody | 10,125.0 | 3.7 |
| 9. Bear Stearns | 5,635.8 | 2.1 |
| 10. Prudential-Bache | 5,189.0 | 1.9 |

* all taxable issues, debt and equity, sold in U.S. only
Source: IDD Information Services, New York

### All issues - domestic*

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Salomon Brothers | 20,448.1 | 14.1 |
| 2. First Boston | 19,864.1 | 13.7 |
| 3. Morgan Stanley | 18,615.5 | 12.8 |
| 4. Merrill Lynch | 17,048.4 | 11.8 |
| 5. Goldman, Sachs | 14,700.6 | 10.1 |
| 6. Drexel Burnham | 13,788.7 | 9.5 |
| 7. Shearson Lehman | 8,735.1 | 6.0 |
| 8. Kidder, Peabody | 3,300.2 | 2.3 |
| 9. Smith Barney | 3,168.9 | 2.2 |
| 10. Dillon, Read | 2,310.1 | 1.6 |

* all taxable issues, debt and equity, excluding mortgage-related and agency issues sold in U.S. only
Source: IDD Information Services, New York

### Non-convertible debt issues

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Salomon Brothers | 36,830.7 | 17.6 |
| 2. First Boston | 31,802.6 | 15.2 |
| 3. Merrill Lynch | 27,255.9 | 13.0 |
| 4. Morgan Stanley | 24,805.5 | 11.9 |
| 5. Goldman, Sachs | 23,045.3 | 11.0 |
| 6. Drexel Burnham | 16,618.7 | 7.9 |
| 7. Shearson Lehman | 15,515.2 | 7.4 |
| 8. Kidder, Peabody | 7,485.2 | 3.6 |
| 9. Bear, Stearns | 4,635.3 | 2.2 |
| 10. Prudential-Bache | 4,013.7 | 1.9 |

Source: IDD Information Services, New York

### Non-investment grade debt

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Drexel Burnham | 11,622.9 | 40.3 |
| 2. Morgan Stanley | 4,353.4 | 15.1 |
| 3. First Boston | 4,039.8 | 14.0 |
| 4. Merrill Lynch | 3,345.4 | 11.6 |
| 5. Goldman, Sachs | 1,975.0 | 6.8 |
| 6. Salomon Brothers | 1,153.1 | 4.0 |
| 7. Kidder, Peabody | 503.9 | 1.7 |
| 8. Donaldson Lufkin | 492.7 | 1.7 |
| 9. Dean Witter | 321.5 | 1.1 |
| 10. Shearson Lehman | 257.0 | 0.9 |

Source: IDD Information Services, New York

### Convertible debt

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Smith Barney | 1,700 | 17.4 |
| 2. Drexel Burnham | 1,170 | 12.0 |
| 3. Goldman, Sachs | 1,035 | 10.6 |
| 4. Morgan Stanley | 960 | 9.8 |
| 5. First Boston | 810 | 8.3 |
| 6. Shearson Lehman | 495 | 5.1 |
| 7. Lazard Freres | 465 | 4.8 |
| 7. Alex. Brown | 465 | 4.8 |
| 9. Kidder, Peabody | 457 | 4.7 |
| 10. Salomon Brothers | 435 | 4.5 |

Source: IDD Information Services, New York

### Mortgage-related debt

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Salomon Brothers | 16,016.2 | 19.8 |
| 2. First Boston | 11,992.9 | 14.8 |
| 3. Merrill Lynch | 9,126.7 | 11.3 |
| 4. Goldman, Sachs | 8,262.7 | 10.2 |
| 5. Morgan Stanley | 6,282.3 | 7.8 |
| 6. Shearson Lehman | 5,942.4 | 7.3 |
| 7. Kidder, Peabody | 4,442.0 | 5.5 |
| 8. Drexel Burnham | 4,000.0 | 4.9 |
| 9. Bear Stearns | 3,540.0 | 4.4 |
| 10. Prudential-Bache | 2,442.2 | 3.0 |

Source: IDD Information Services, New York

### Common stock

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Goldman, Sachs | 6,652.6 | 16.2 |
| 2. Merrill Lynch | 4,458.3 | 10.9 |
| 3. Alex. Brown | 2,733.7 | 6.7 |
| 4. Shearson Lehman | 2,623.1 | 6.4 |
| 5. First Boston | 2,551.7 | 6.2 |
| 6. Wheat, First | 2,535.0 | 6.2 |
| 7. Drexel Burnham | 2,481.1 | 6.0 |
| 8. Morgan Stanley | 2,254.1 | 5.5 |
| 9. Salomon Brothers | 2,108.7 | 5.1 |
| 10. Kidder, Peabody | 1,350.3 | 3.3 |

Source: IDD Information Services, New York

### Non-convertible preferred stock

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Goldman, Sachs | 1,373 | 17.4 |
| 2. First Boston | 1,173 | 14.9 |
| 3. Merrill Lynch | 1,145 | 14.5 |
| 4. Morgan Stanley | 1,142.4 | 14.5 |
| 5. Salomon Brothers | 910 | 11.5 |
| 6. Drexel Burnham | 660 | 8.4 |
| 7. Shearson Lehman | 511.1 | 6.5 |
| 8. Bear Stearns | 280 | 3.5 |
| 9. Oppenheimer | 270 | 3.4 |
| 10. Kidder Peabody | 165 | 2.1 |

Source: IDD Information Services, New York

In the global ranking, prepared by Securities Data, First Boston/Credit Suisse First Boston held a 10.7% market share in 1987 compared with the 10.3% share held by Salomon. In 1986, First Boston/CSFB did 13.2% of the business vs. Salomon's 12%.

Wall Street's top five firms held a combined domestic market share of 63% in 1987 compared with 65% in 1986. Worldwide, the top five held 46% of the market share compared to 48% the previous year.

Overall, the lineup of managers in the top spots changed considerably between 1986 and 1987. In the domestic market, Morgan Stanley & Co. Inc. dropped to fifth place after placing third in 1986, and Drexel Burnham Lambert Inc. fell to sixth place from fourth a year earlier.

Merrill Lynch muscled its way to third after finishing fifth in 1986, and Goldman, Sachs & Co. boosted its standing by moving to fourth place from sixth.

In the global ranking, third-ranked Goldman, Sachs switched places with Morgan Stanley, which finished 1987 in fifth place.

The year's most notable come-from-behind story is probably the performance of Smith Barney, Harris Upham & Co. in the convertible debt market. Smith Barney, which ranked 12th in that market in 1986, displaced Drexel Burnham Lambert Inc. for the top spot last year.

"We recognized the potential demand for new convertible offerings," said A. Richard Janiak, managing director at Smith Barney. "We informed our clients of that early."

Smith Barney managed big convertible debt offerings for Prime Computer Inc., Browning-Ferris Industries Inc., The Mead Corp. and other issuers.

Morgan Stanley came from near the cellar in the convertible preferred stock sector, moving to the top spot from 13th in 1986. Drexel was the first-ranked underwriter in this sector in 1986.

The leaders in various domestic market segments generally held their top-ranked positions, but the gap between No. 1 and the runner-up typically diminished.

For example, First Boston saw its 90% share of the asset-backed security market drop to 50% in 1987. IDD includes debt and equity issues backed by non-mortgage commercial receivables.

First Boston's decline in market share was not unexpected, Mr. Schroth said, noting Wall Street firms typically adapt ideas developed by others. "New products in investment banking have a very short half-life. If you can figure out a way we can copyright new ideas, that would change the business dramatically."

Similarly, Drexel saw its share of the public high-yield debt market shrink to 40% after holding 45% in 1986. "Market share is not as important as other things," said a Drexel spokesman, adding the firm's private placement of high-yield offerings boosts its share of the total high-yield market.

Morgan Stanley chopped away at Drexel's lead in 1987 with big high-yield financings for Owens-Illinois Inc., Burlington Holdings Inc. and other issuers. Morgan has boosted its professional high-yield staff by between 30% and 40% since 1986, said Neal S. Garonzik, a managing director in the merchant banking department. ■

## CURRENT ACCOUNTS

*Continued from page 30*

**JMB Realty Corp.**
Sacramento (Calif.) County Employees' Retirement System: private placement; $30 million. Pension Reserves Investment Trust Fund: private placement; $15 million. California State Employees' Retirement System: private placement; undetermined. American Information Technologies Corp.: private placement; undetermined. State of Connecticut Trust Funds: private placement; undetermined. Iowa Public Employees Retirement System: private placement; undetermined. Board of Pensions of the Presbyterian Church: private placement; $30 million.

**Murray Johnstone Ltd.**
Shipbuilding Industries Pension Scheme: equities; $139.7 million.

**Johnstown Bank and Trust Co.**
Lee Hospital: fixed income; $3.15 million.

**W.R. Lazard & Co.**
Avon Products Inc.: fixed income; $18 million.

**Lazard Freres Asset Mgmt.**
Morton Plant Hospital Retirement Fund: equity; $5 million.

**Lehndorff & Babson Real Estate**
School Employees Retirement System of Ohio: real estate management; $155 million.

**Liberty Capital Mgmt. Inc.**
Easco Corp: fixed income; $7.5 million. Fel-Pro Inc.: fixed income; $5 million.

**Lincoln Capital Mgmt. Co.**
Allegis Corp.: equities; undetermined.

**Loomis, Sayles & Co.**
Tucson Electric Power Co.: active fixed income; $8.3 million. Ray Industries: fixed income; undetermined. League of Voluntary Hospitals and Homes of New York: corporate fixed income; undetermined.

**Manning and Napier Advisors**
Cyclops Corp.: balanced; $10 million.

**McCowan Associates Inc.**
Allegis Corp.: equities; undetermined.

**Mechanics Bank**
California Bankers Association: balanced; $13 million.

**Mellon Capital Mgmt. Corp.**
Bayer USA Inc.: S&P index fund; $31 million.

**Metropolitan Life Insurance Co.**
Citicorp: annuities; $400 million. Fulton County (Ga.) pensions funds: guaranteed real estate contract; $1.5 million.

**Miller, Anderson and Sherrerd**
Moore Corp. Ltd.: equity; $70 million. Columbia University endowment: fixed income; $75 million. Columbia University endowment: equity; $150 million. Pennsylvania State Employes' Retirement System: equity; $100 million. Iowa Electric Light & Power Co.: equities; $100 million.

**Morgan Grenfell Investment Services**
Los Angeles County Retirement Fund: international equity; $90 million.

**J.P. Morgan Investment Mgmt.**
League of Voluntary Hospitals and Homes of New York: open-end real estate fund; undetermined. Missouri Local Government Employees' System: open-end real estate fund; portion of $15.5 million. Allegis Corp.: fixed income; undetermined. Hercules Inc.: dedicated bond account; $100 million.

**NCNB National Bank**
Jacksonville (Fla.) Police and Fire Pension Fund: real estate; $15 million.

**Neuberger & Berman**
Lee Hospital: fixed income; $3.15 million.

**Newbold's Asset Mgmt.**
Jefferson County (Ala.) General Retirement System: equity; about $20 million.

**Nikko & Associates Inc.**
Thomas J. Lipton Inc.: indexed equity; $120 million.

**NWQ Investment Mgmt. Co.**
City of Aurora (Colo.) Retirement Plan: balanced; $15.5 million.

**Pacific Investment Mgmt. Co.**
Allegis Corp.: fixed income; undetermined.

**L. Roy Papp & Associates**
City of Aurora (Colo.) Retirement Plan: balanced; $10 million.

**PRIMCO Capital Mgmt. Inc.**
Ray Industries: fixed income; undetermined.

**Provident Investment Counsel**
Pennsylvania State Employes' Retirement System: equity; $100 million. Iowa Electric Light & Power Co.: equities; $100 million.

**Prudential Insurance Co.**
General Motors Corp.: manager of GM convertible preference shares; $1.04 billion.

**Rosenberg Institutional Equity**
Columbia University endowment: equity; $150 million.

**Salomon Brothers Inc.**
Maryland State Retirement and Pension Systems: dedicated bond portfolio; $4 billion.

**Sasco Capital Inc.**
League of Voluntary Hospitals and Homes of New York: equities; undetermined.

**SBC Portfolio Mgmt. Int'l Inc.**
Whirlpool Corp.: international equity; $35 million. Upjohn Co.: international equities; $24 million.

**Schroder Capital Mgmt. Int'l**
Whirlpool Corp.: international equity; $35 million. Upjohn Co.: international equities; $24 million.

**Schroder Real Estate Associates**
Alameda County (Calif.) Employees' Retirement Assn.: closed-end real estate fund; $7.5 million.

**Securities Counsel Inc.**
Herman Miller Inc.: equity; $5 million. Houston Municipal Employees Retirement System: equity; $19 million. LSI Lighting Systems Inc.: balanced; $2 million. American Trans Air Inc.: undetermined; $1.5 million.

**Sit Investment Associates Inc.**
Allegis Corp.: equities; undetermined.

**State Street Bank & Trust Co.**
Tucson Electric Power Co.: master trustee; $37 million. International City Management Association Retirement Corp.: master trustee; $850 million. Gulf & Western Inc.: GIC portfolio; $150 million. Campbell Soup Co.: GIC fund; undetermined. Inland Steel Industries Inc.: guaranteed investment contract fund; $65 million.

**STW Fixed Income Mgmt. Inc.**
Columbia University endowment: fixed income: $50 million. Ray Industries: fixed income; undetermined. Fel-Pro Inc.: fixed income; $20 million.

**Sun Banks Inc.**
Alexander & Alexander Inc.: equity; $20 million. Pennsylvania State Employes' Retirement System: equity; $200 million.

**Sun Bank Investment Mgmt. Group**
Easco Corp.: equities; $4.6 million. Iowa Electric Light & Power Co.: equities; $30 million. Pennsylvania State Employes' Retirement System: equities, $200 million. Jacksonville (Fla.) Police and Fire Pension Fund: equities; $30 million.

**Sun Bank Trust Banking Group**
Morton Plant Hospital Retirement Fund: equity; $5 million.

**TCW Realty Advisors**
Missouri Local Government Employees' System: closed-end real estate fund; portion of $15.5 million.

**Thompson, Siegel & Walmsley**
Jefferson County (Ala.) General Retirement System: equity; about $20 million.

**Warburg Investment Mgmt. Int'l**
Los Angeles County Retirement Fund: international equity; $90 million.

**Weiss, Peck & Greer**
Columbia University endowment: fixed income; $25 million. Allegis Corp.: equities; undetermined.

**Western Asset Mgmt. Co.**
Batus Inc.: fixed income; $50 million to $100 million.

# Indexing

*Continued from page 3*

dent of Westridge Capital Management, Los Angeles.

On Oct. 19 and the next few days, some users of The Vanguard Group's actively managed stock mutual funds expressed interest in moving to the index funds, as some of the active funds had higher volatility than the market, said Brian Mattes, vice president of Vanguard, Valley Forge, Pa.

Stock index arbitrage — moving between stock index funds and futures to take advantage of mispricings — has been accused of causing or exaggerating the stock market's decline. With that has come the threat of new regulation of such trades, but several stock index fund managers continue to use arbitrage.

Any new regulations would affect everyone, Mr. Fouse noted. "Worry (about new regulations) is non-productive," he said.

"Regulations may not be as pointed as it seemed they would be in the third week in October," Mr. Krisik added.

A few have pulled back from arbitrage. "Clients perceive that as being very risky," Mr. Malpass said, so Irving Trust hasn't used the strategy much since October.

Vanguard, like some other managers, has never used arbitrage in its index funds. "The use of futures and options for other than hedging purposes actually puts on more risk than the market itself has," Mr. Mattes said.

Those that are using arbitrage report it still offers plenty of opportunities to add return. "We've had no shortage," Mr. Carder said.

The use of futures and options to enhance bond index funds is becoming more widespread. Security Capital Management Inc., Stamford, Conn., maintains a heavy position in interest rate futures, said Bob Brewer, chief investment officer.

Overall, bond indexing is gaining increased acceptance, managers said. "We have seen an increase in interest in structured fixed-income management, to include indexing," said Ken Meyer, executive vice president of Lincoln Capital Management, Chicago.

Bond index funds may benefit especially if pension funds increase bond allocations in response to Black Monday, said Ed Swan, manager of the asset management group at WR Lazard & Co., New York.

Index fund managers track a wide variety of benchmarks; among stock index funds, the S&P 500 remains the index of choice, but new and customized indexes are picking up ground.

Not all managers provided data on how much of their assets tracked a given index. Among stock index fund managers that did — accounting for $70.4 billion, $45.1 billion, or 64.1%, tracked the S&P 500 or a subset of it as of Nov. 30.

The Wilshire 5000 accounted for $3.8 billion, or 5.4% of the assets, and various other indexes accounted for $21.4 billion, or 30.5%. Most of the $21.4 billion tracks indexes customized for clients, but a modest portion is tied to the Russell 1000, 2,000 or 3,000 indexes.

Among the $36 billion in bond index funds for which this information was available, $19.9 billion, or 55.3%, tracked custom indexes. A total of $12.5 billion, or 34.7%, tracked the Shearson Lehman index or a subset of it and $3.6 billion, or 10%, tracked the Salomon Brothers Broad Investment Grade bond index or a subset of it.

Among the $5.5 billion in international funds for which the information was available, $3.8 billion, or 69%, tracked the Morgan Stanley Capital International EAFE or World indexes, while the remainder tracked various new or customized indexes. ■

# Active managers don't beat market

**By Jacqueline Dutton**

SANTA MONICA, Calif. — Active equity managers underperformed the stock market in October and the 10 months ended Oct. 31, and value managers failed to add much value in the down market, according to unpublished data compiled by Wilshire Associates for its clients.

Marcia Ryles, senior associate at Wilshire, said the performance of 113 active managers — those who sell themselves on their ability to outperform the market on a risk-adjusted basis — was worse overall than the Standard & Poor's 500 stock index for the one- and 10-month periods.

"There was a wide range of returns, but it shows most managers did not add value to the index," she said.

In addition, Ms. Ryles said value managers — who typically are the better performers in down markets — added little value over the S&P 500 for the month of October.

"They offered very little protection," she said. Because they failed to add real value to portfolios, she suggested the "value" managers might be more appropriately described as "conservative" managers.

Ms. Ryles said the performance figures have raised the eyebrows of Wilshire clients, but have not resulted in any terminations. She said instead of pointing the finger at individual managers, pension fund executives are stepping back and reassessing their asset allocations, which likely will result in a transfer of assets into indexed accounts.

"Our clients right now are mostly taking a wait-and-see approach," she said, but that could change as a result of year-end evaluations, she added.

She said clients also are interested in looking more at asset structure than manager selection because those who were well diversified heading into the October crash were glad of it.

"Most of our clients are taking a look at asset allocation because this showed it (diversification) really worked," Ms. Ryles said.

The median performance among active managers profiled by Wilshire was −22.4% during October, while the S&P index returned −21.6%. Managers in the fifth percentile returned at least −15.2% and those in the top 25% returned at least −19.5%. Managers in the 75th percentile range returned −25.3% at the minimum, and those in the 95th percentile bettered −29.6%.

Active managers fared even more miserably during the 10 months. Ms. Ryles said the median manager in the Wilshire universe returned only 1.6%, while the S&P 500 returned 6.6%, a figure that would have placed the index at the 20th percentile in the universe. The top quartile of managers returned at least 5.7% and the top 5% of managers returned a minimum 11.6%. Those in the 75th percentile returned at least −2.5% and those in the 95th percentile returned a minimum −8.5%.

When the performance of the 20 managers in the universe that use value-oriented styles were broken out, the results were even more surprising, she said.

The median manager, Ms. Ryles said, barely outperformed the market during October, with a −20.8% return, adding less than one percentage point of value. In contrast, Ms. Ryles said, value managers added up to five percentage points of value during the down market in 1981.

"It seems they added more value in that previous down period, but perhaps it was a different market," she said. "(And) no one added value in this market."

The best-performing value managers, she said, probably held a lot of cash. The top fifth percentile returned at least −16.1% in October and the top quartile, −18.9%. The third quartile returned at least −22.6% and the 95th percentile returned at least −25.4%.

For the 10-month period, value managers also failed to beat the market; the median managers returned 2.9%.

# 401(k) view changing

WASHINGTON — Bruised by tax reform and battered by the stock market crash, investors who used 401(k) plans to pick up short-term gains in stocks might change their ways, according to the the Employee Benefit Research Institute.

According to the non-profit public policy research organization, tax reform left 401(k)s more attractive as long-term retirement plans, particularly as an alternative to individual retirement accounts.

Tax changes put a $7,000 limit on tax-exempt contributions to 401(k) plans and placed restrictions on early withdrawals, EBRI stated.

The market crash showed those who chose to invest contributions only in stocks the risks behind putting all the nest eggs in one basket.

EBRI predicted there will be more diversification into other investment options, such as bond funds, as a result of the crash.

The value of defined contribution plans — typically tax-sheltered savings plans in which employees contribute part of their pay — dropped $54 billion, or 12%, from the market's peak Aug. 25 to Oct. 30.

But these changes will affect a minority of 401(k) plan investors, typically those at the high end of the pay scale.

Still, EBRI suggests employers should make an effort to help employees understand the risks and the rules associated with plan participation. ■

# Financing

*Continued from page 1*
ties of their bond offerings and increase their dependence on bank borrowing. The flight to quality precipitated by the recent collapse in stock prices will keep issuance of high-yield debt in 1988 below the near $3 billion average monthly clip of 1987. In response to a declining dollar, and the attendant lack of interest by investors abroad, U.S. corporations will curtail their bond offerings in the Eurodollar market.

The projected steady level of net bond financing in 1988 masks continued declines in gross offerings and call activity, the investment bank said. Gross issuance will come to $126 billion, $5 billion less than this year and $20 billion below 1986's level. Calls, which totaled nearly $40 billion in 1986 and about $32 billion in 1987, will amount to just $27 billion next year.

Both trends, Salomon Brothers said, reflect a significant drop-off in utility refinancings.

Meantime, equity retirements will overwhelm new issuance for the fifth consecutive year. The volume of new cash offerings will fall by about $10 billion, or 15%, and retirements via buybacks will increase modestly, the investment bank predicts.

On the pension side, the investment bank said that during October, the average funding ratio for corporate pension sponsors slipped to 160% from about 200%. Any favorable earnings impact that had been anticipated in the form of reduced pension expenses has been muted.

Nonetheless, the surplus still stands somewhat above year-end 1986 levels.

The impact of the decline in the pension surplus on balance sheets might be more significant. Under the Financial Accounting Standards Board Statement 87, if pension assets fall below liabilities, the shortfall must be carried on the balance sheet as a net unfunded liability. In September, only 2% to 3% of all pension sponsors had a net unfunded pension liability. After Oct. 19, 5% to 10% of all pension sponsors fell into that category.

Salomon Brothers said it is reasonable to assume pension sponsors that have a small surplus, with assets only slightly in excess of liabilities, will be loath to report a new liability on the balance sheets. These pension sponsors will have a powerful incentive to avoid equity market risk and could well be active sellers of stocks in 1988.

Salomon expects both public and private pension funds to shift from equity investment toward debt instruments of appropriate duration.

Private funds are expected to accelerate their net liquidation of stocks to more than $30 billion in 1988 from about $19 billion in 1987.

More specifically, Salomon said that for the first time in the post-World War II period, financial institutions will be net sellers of corporate stocks — liquidating more than $10 billion in 1988. In 1986 they acquired nearly $50 billion, and in 1987, Salomon estimates they took down more than $10 billion.

The selloff is concentrated in private pension funds, which continue their shift out of equities into long-duration debt. Even after the market collapse, pension funds have nearly $525 billion, or 55% of their total assets, in stocks. Other institutions will either be net sellers or will curtail their net equity purchases substantially in the wake of 1987's extreme market volatility, the Salomon report said.

Turning to another financing trend, Salomon Brothers said it expects the booming market for mortgage-backed securities to slow amid weak residential housing starts and new residential mortgages and excess capacity in commercial mortgages.

Net additions to the supply of securitized mortgages will remain at the slow pace of the last few months of 1987. This will translate into an annual volume of $122 million, $20 billion below 1987's level. ■

**Net equity purchases / 1982 through first half of 1987**
**($ millions)**

| | First half 1987 | 1986 | 1985 | 1984 | 1983 | 1982 |
|---|---|---|---|---|---|---|
| Foreign investors | 27.7% | 31.2% | 11.8% | — | 11.7% | 11.9% |
| State and local pension funds | 28.7 | 22.1 | 49.5 | 52.6% | 43.0 | 18.3 |
| Mutual funds | 34.1 | 35.0 | 24.6 | 42.3 | 29.3 | 10.6 |
| Property/casualty insurance | 4.3 | 4.7 | — | — | 4.5 | 8.2 |
| Life insurance | 4.9 | 6.8 | 14.1 | 5.1 | 6.5 | 10.4 |
| Private pension funds | — | — | — | — | 4.9 | 40.6 |
| TOTAL NET BUYING | $63,975 | $57,430 | $42,004 | $13,838 | $46,507 | $32,908 |

Source: Salomon Brothers Inc., New York

# Foreigners jump in

## Overseas cash pumped up soaring market

**By Joel Chernoff**

NEW YORK — Foreign investment in U.S. equities buoyed the stock market through the first three quarters of 1987, a Salomon Brothers Inc. study shows.

The study found 76.7% of the Dow Jones industrial average's 800-point gain in the nine-month period occurred during the first half-hour of each trading day, when overseas buyers are most active. "Similarly, 83.5% of the total net inflow of $23.3 billion occurred in the same 30-minute span" of the trading day, said Salomon's market review and outlook for global equities.

But when the surge of foreign buying will return (after being stopped short by the Oct. 19 stock market crash) remains uncertain, as central banks attempt to stabilize the falling dollar. Until that time, "a (foreign) customer would be somewhere between heroic and stupid" to invest in the U.S. market, said Robert Brusca, senior vice president and chief economist for Nikko Securities Co. International, New York.

"I think you'd need a long period of stability to get foreigners interested in size," said George Murnaghan, vice president at Rowe-Price Fleming International Inc., Baltimore.

Without a stabilized dollar, pressure to push up the stock market will have to come from U.S. investors, he said. But a dried-up flow of foreign dollars has negative implications for the bond market, which may see higher yields to attract investment. That, in turn, is bad news for the stock market, Mr. Murnaghan said.

Some investment professionals already see signs that foreign investors are renewing their plans to plunge into U.S. stocks.

The Japanese tend to stick with their long-term objectives and now, with stocks at cheaper prices and the dollar devalued, "it's like Filene's basement — name-brand products for 20% off," said William Jacques, partner at Martingale Asset Management, Boston.

Last week, with the dollar showing signs of recovering from post-World War II lows against the Japanese yen, Japanese investors started to edge back into the U.S. stock market, said Motoi Okada, executive vice president, Daiwa Securities America Inc., New York.

But Japanese investors are ready to flee if the market declines, Mr. Okada added.

Market observers have suggested foreign investors have boosted stock prices during the past couple of years. In particular, prices of stocks in the Standard & Poor's 500 index have increased far more than stocks of similar capitalization, reflecting foreign desires to purchase household names as well as the effect of growing assets placed in index funds and use of derivative instruments (*Pensions & Investment Age*, Sept. 7).

The Salomon Brothers study provides some hard evidence to back the contentions: Foreign investors accounted for 27.7% of net equity purchases in the first half of 1987, 31.2% in 1986 and 11.8% in 1985.

Only state and local pension funds and mutual funds have played as large a role in making net equity purchases during that time, while net purchases by private pension funds have been flat since 1983 (*see chart*).

In fact, private funds experienced net withdrawals in 1987, according to the Employee Benefit Research Institute, Washington. Private pension funds had net withdrawals of $13.1 billion from stocks in the third quarter, a sharp increase from the second quarter's $4.8 billion withdrawal, and close to the $15.7 billion in withdrawals in the first quarter of 1987.

In addition, Salomon expects households to be net sellers to mutual funds, public funds and foreign investors.

The Salomon study also found:

- Euroequity issues soared to $21 billion in 1987, up from $600 million in 1983. U.S. corporations relied more on global issues, with Eurotranches accounting for 8.7% of total issuance, up from 5.2% in 1986.
- Mergers and acquisitions have become increasingly global. Nearly one-third of the $281.4 billion in mergers and acquisitions worldwide were transnational, including such major deals as British Petroleum's $7.4 billion acquisition of Standard Oil Co., Cleveland, and Chicago-based Amoco Corp.'s $4.1 billion purchase of Dome Petroleum Ltd., Calgary, Alberta.
- Corporate reorganizations continued strong in 1987, with total completed and pending efforts reaching $231 billion, down from $275 billion in 1986. Of that total, corporate buyback programs surged to $70.8 billion from $44.8 billion the year before; one-third of the announced share buybacks occurred in the second half of October.
- The 10 S&P 500 stocks whose market capitalizations appreciated the most accounted for 37% of the index's gains, led by **Merck & Co. Inc.**, **Dow Chemical Co.** and **Ford Motor Co**.
- The 10 stocks whose prices showed the largest gains however, added just 6.5% of the gain to a market-weighted portfolio. The biggest gainers were **Reynolds Metals Co.**, 107.5%; **Bethlehem Steel Corp.**, 106%; **Phelps Dodge Corp.**, 92.7%; and **First Mississippi Corp.**, 92%.
- 1988 will be a difficult year for the stock market. The presidential elections, the possibility of a recession, changes in the securities industry — including a decline in research and an unclear future for derivative instruments — and memories of the October crash make predictions uncertain. Nevertheless, Salomon suggests that aerospace, oils, insurance and banking-industry stocks could do well.
- Worldwide markets will perform well, influenced by positive growth rates, stable governments, growth of derivative securities trading and other factors, such as liberalized capital markets, growth in international funds, adequate global liquidity, continued privatizations of government-owned companies, and increased debt-for-equity swaps in developing markets. ■

# Fund makeover

*Continued from page 1*
billion, were not affected.

The six passively managed core portfolios, which initially will hold between $6.4 billion and $8 billion, represent growth- and value-oriented accounts in each of three capitalization groups — large, intermediate and small — and will hold about 1,000 different stocks.

The original parameters for the capitalization groups were $1 billion or more in market capitalization for the large group, $500 million to $1 billion capitalization for the intermediate group and $500 million or less for the small group.

"We float (the parameters) with changes in the market so that we get a uniform group of companies" in each of the categories, Ms. Marshall said.

Computer models then are used to screen out stocks from these broad groups for the active portfolios, to which between $1.6 billion and $2 billion will be allocated initially.

"Depending on the results we get, we'll either increase or decrease the allocations to the active portfolios," she said.

The active portfolios were created because "we wanted to see if we could add value" through active management, she said. The performance of the active portfolios, as well as that of the external managers, will be compared to the results of the core portfolios.

"We'll be comparing to the normal indexes also, but I felt we'd have more meaningful information if we had these very specifically designed subsets.

"We thought we could make better decisions regarding the capabilities of our managers if we had better portfolios to compare them against," Ms. Marshall said. Results of the outside actively managed portfolios also will be compared to the results of the in-house active portfolios.

"The capitalization sizes are important because there has been reason to believe in the past that small-cap stocks outperform (large-cap stocks) over a long period of time."

In addition, "we wanted to find out if there is more value from active management in the (large-capitalization) sector or the small sector," she said.

Ms. Marshall said the retirement system has about $2 billion invested in about 100 different stocks of companies doing business in South Africa. Those holdings are being placed in a separate portfolio because California law requires the system to sell all such holdings during the next three years. ■

# Market swings

*Continued from page 2*
but showing up on 44% of the ballots.

Last year, two federal appeals courts issued rulings on the question of surplus asset ownership, yet the decisions did little to resolve the dispute.

In a case heard by the 11th U.S. Circuit Court of Appeals, Blessitt vs. Dixie Engine Co., the employer was ordered to pay out unaccrued, forfeitable benefits as well as all accrued benefits before taking any of the surplus assets. In the other case, Tilley vs. The Mead Corp., heard in the 4th U.S. Circuit Court of Appeals, the employer was ordered to pay out early retirement benefits to compensate employees who had not reached the designated retirement age.

For the second year in a row, portfolio insurance made enough headlines to rank among the five most important stories, squeaking into the top five with only 29 points but appearing on more than 40% of the questionnaires.

The strategy was in the news throughout the year, but never more so than following the Oct. 19 market crash. Already being questioned for its higher-than-expected costs, the program was in the spotlight after the crash as pension and other investment industry executives tried to decide whether the strategy was a success and what — if any — role it played in pushing the falling market down even further. ■

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PENSIONS &

January 25, 1988

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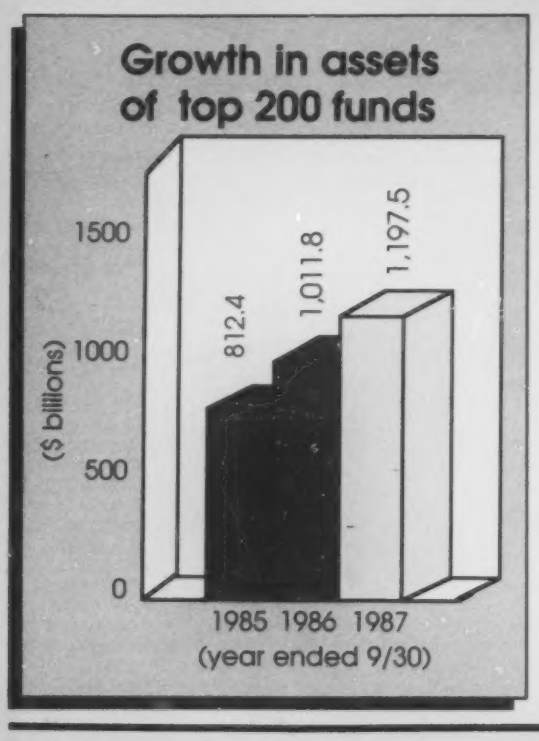
PENSIONS & January 25, 1988

Investment Age

Special Profiles Issue $20 an issue

# A $1 trillion milestone

## Top 100 soared with bull market




By Chuck Paustian

Assets of the nation's 100 largest employee benefit funds broke the $1 trillion mark for the first time — climbing 18.5% to $1.002 trillion as of Sept. 30, *Pensions & Investment Age*'s annual pension fund survey shows.

Strong performance of equity investments fueled the increase in assets of the Top 100 funds, as benefit payments continued to outpace employer contributions.

- **The Top 1,000 funds increased 17.8% to $1.578 trillion.**
- **The Top 200 funds increased 18.4% to $1.198 trillion.**

On average, those funds had 48.1% of their assets invested in the equity market, which rose 43.5% during the year ended Sept. 30.

Bond investments, to which the Top 100 funds had allocated an average of 31.9% of their total assets, dampened the growth. The Shearson Lehman Government/Corporate bond index, declined 0.4% during the 12 months ended Sept. 30.

The stellar performance of equity investments during the year ended Sept. 30 also boosted the asset totals of other universes of employee benefit funds. The 1,000 largest funds increased 17.8% to $1.578 trillion, from $1.339 trillion, while the Top 200 funds rose 18.4% to $1.198 trillion, from $1.012 trillion.

The Top 1,000 funds had an average of 47.5% invested in stocks, while the Top 200 funds had, on average, 47.1% of their assets invested in equities.

Those same equity investments that had performed well for funds during the past few years quickly turned the table on most investors during the month of October, although pension funds didn't get hurt as much as the stock indexes did (*see accompanying story this page*).

According to *P&I Age* data, the 25 largest employee benefit funds grew 21.4% to $582 billion as of Sept. 30, from $479.3 billion a year earlier, and the 50 largest employee benefit funds increased 20.3% to $794.2 billion, from $660.1 billion the previous year.

Total employee benefit assets of the bottom 800 funds, those with assets between $1.3 billion and $164 million, rose 16.4% to $380.1 billion as of Sept. 30, from $326.5 billion the year before.

Among the Top 200, corporate funds — generally more aggressive in their investment strategies than their public, union or miscellaneous fund counterparts — posted the largest increase, 21.3%, rising to $540.8 billion as of Sept. 30, from $445.9 billion.

*Continued on page 82*

# Plan strategies cut crash costs

## Western Teamsters loses just 1.3%

By Nancy K. Webman

Pension funds didn't take nearly as severe a beating in the market crash as the stock indexes did, and asset allocation minimized their losses, a *Pensions & Investment Age* survey shows.

Defined benefit assets of 66 of the nation's largest 200 employee benefit funds surveyed by *P&I Age* declined an average 9.4% during October, faring far better than the Standard & Poor's 500 stock index, which plunged 21.56% in the same month.

**"Asset allocation . . . turns out to be far more relevant than what stocks they bought or what managers they hired."**
**—Gilbert Beebower SEI**

Although the 66 funds had an average of 46% of their assets in the stock market going into the now-legendary month of October 1987, they had more money — an average of 50.9% — in fixed-income instruments.

Those investments, including bonds, short-term investments, guaranteed investment contracts, mortgages and mortgage-backed securities, generally reduced the impact of the stock losses, and scored positive returns for the month, noted Dimitri Raftopoulos, vice president of the advanced product concepts group at SEI Corp., Wayne, Pa.

"Asset allocation, however it is derived, turns out to be far more relevant than what stocks they bought or what managers they hired," said Gilbert L. Beebower, executive vice president of SEI.

"Choices among asset classes made the difference" in October, he said.

That's because "there was no place to hide" in the stock market during that time, said Dan H. Bryant, director of client services at Butcher Consulting in Pittsburgh. "The way not to get killed" would have been to have bought only relatively higher yielding, larger capitalization stocks with lower price-earnings ratios, Mr. Bryant said.

And because stocks that meet all three criteria make up such a tiny per-

*Continued on page 83*

**Small-capitalization stocks of companies like computer technology firm MSI Data Corp. are gaining a place in venture capital portfolios, especially because of their post-Oct. 19 crash bargain-basement prices.**

# Small-cap allure

## Cheap stocks attract venture capitalists

By Trudy Ring

Small-capitalization stocks, available at bargain-basement prices after the October crash, are gaining popularity as a venture capital enhancement or option.

"There are so many small public companies now that are at 10 times earnings, that are financially strong . . . with little or no debt — if I had a bias, it would be toward the public side," said Edward T. Tokar Jr., vice president-investments at the $6.8 billion Allied-Signal Corp. pension fund, Morristown, N.J.

Much of the interest in small-cap

*Continued on page 85*

## LATE NEWS

### Bank of America surrenders

SAN FRANCISCO — BankAmerica Corp., after months of problems with its Bank of America trust accounting system, is shifting most of that institutional trust business to another subsidiary, Seattle First National Bank. Bank of America has spent $60 million to improve the malfunctioning MasterNet system, which cost $20 million. A spokesman said Seattle First's system will take 95% of the bank's clients; arrangements are being worked out for the rest. As of June 30, Bank of America had $16.2 billion in master trust or custody assets for 37 clients.

### New plan to tap assets

NEW YORK — City Finance Commissioner Stanley Grayson wants to use the clout of its $30 billion pension fund to make major investments in local economic development projects. But Comptroller Harrison Goldin and city union leaders are cautious, citing questions of fiduciary responsibility and adequate return.

"Given cuts in federal spending, we have to begin looking at new sources of capital to benefit New York City employees and residents," Mr. Grayson told Crain's New York Business, a sister publication of *Pensions & Investment Age*. Plans are still in the preliminary stages and no investment opportunities have been targeted.

"If he (Mr. Grayson) comes up with something with a market rate of return and acceptable risk, we will go along with it; but we've been unable for years to develop a mechanism for such a comprehensive program," said a spokesman for Mr. Goldin.

### A new view to corporate finance

NEW YORK — With pension funds stepping up their investments in leveraged buy-outs, company workouts and restructurings, corporate finance investing is emerging as a pension investment class of its own, according to New York State Comptroller Edward V. Regan.

Last week Mr. Regan, who oversees the state's $38.7 billion pension fund, also told an Institute for International Research conference on private placements that consultants need to develop the expertise to advise pension funds on strategy and individual corporate finance investments.

"It is essential that pension systems considering corporate finance investments treat them as they do other major investment categories in terms of process and procedure. It is a separate asset class, and needs established standards, selection and monitoring procedures and controls," Mr. Regan said.

### PBGC revises deadlines

WASHINGTON — The Pension Benefit Guaranty Corp. is giving sponsors of defined benefit plans more time to pay the variable portion of the new pension insurance premium.

While employers must pay the $16-per-participant flat rate within two months of the beginning of a plan year, they have 8½ months after the end of the plan year to pay the variable portion. Under the law passed last month, a plan must pay out $6 per participant for every $1,000 of underfunding in addition to the flat rate, up to a maximum total premium of $50 per participant.

## HIGHLIGHTS

### Wall Street brainpower — P. 68

Wall Street investment bankers used a lot of brainpower in 1987 through the creation of innovative public offerings for clients. *Pensions & Investment Age* takes a detailed look at the 14 best deals created by the Street's financial wizards and describes the problems that made clients look to the Street for help.

## 1,000 FUNDS


| | | | |
|---|---|---|---|
| Top 1,000 funds | 13 | Real estate equity | 75 |
| Top 1,000/total assets | 13 | Mortgages | 76 |
| Top 200 funds: | | Oil & gas | 80 |
| Average asset mix | 13 | Top miscellaneous | 82 |
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Vol. 16, No. 2 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1988.

Cover by Avalon Studios, Chicago

# 66% drop in portfolio insurance

By Trudy Ring

Portfolio insurance isn't dead, but the pool of assets it covers has shrunk by about two-thirds and the means of implementing it are changing, with options-based strategies attracting interest and assets.

As of Dec. 31, 14 portfolio insurance vendors interviewed by *Pensions & Investment Age* hedged $12.6 billion in the strategy, down from $37 billion as of Sept. 30.

The total portfolio insurance market as of Sept. 30 was about $68 billion (*P&I Age*, Nov. 2); some managers of the strategy declined to provide year-end figures, or could not do so by press time. The $68 billion includes an estimated $22 billion under management for Leland O'Brien Rubinstein Associates Inc., Los Angeles; LOR officials do not divulge this data.

No estimate for LOR is included in the Dec. 31 figure; John O'Brien, chairman and chief executive officer, said assets under management decreased substantially in the fourth quarter, but would not give a dollar figure. Other sources estimated assets covered by LOR programs dropped by between one-half and two-thirds.

"In the current environment, it may be that the cost of portfolio insurance has risen and it may be used less," said Frederick L.A. Grauer, president of Wells Fargo Investment Advisors, San Francisco. Wells Fargo's assets under management for portfolio insurance fell to $3 billion from $9.2 billion in the fourth quarter.

"We certainly are still getting

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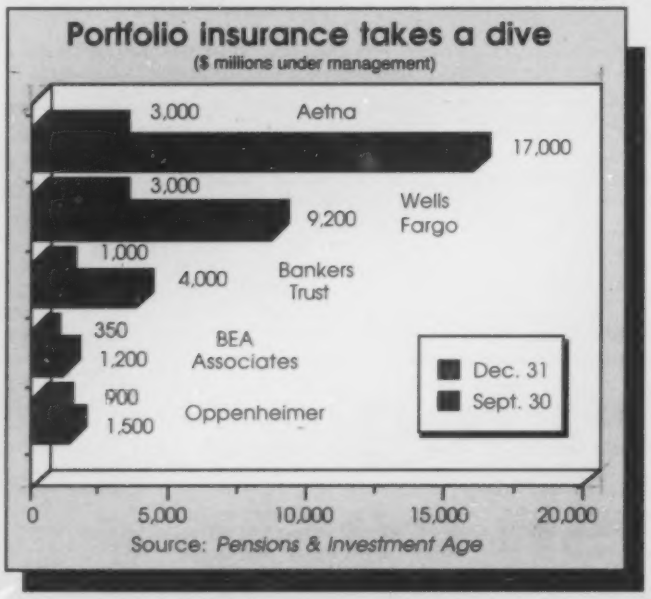


Turn-around companies like truckmaker Navistar get help from the budget law.

# Some firms get a break

By Marcia Parker

WASHINGTON — Once struggling corporations whose fortunes have improved will be encouraged to make — instead of being penalized for making — large contributions to their underfunded pension plans in a given year under two little-noticed provisions in the new budget reconciliation law passed by Congress last month.

If companies take advantage of the provisions, the huge unfunded liabilities of some corporate pension funds may shrink significantly in 1988 and beyond.

"ERIC had lobbied early on for the elimination of all barriers to full funding," said Marc Ugoretz, executive director of the ERISA Industry Committee, Washington. "We are going to see more

*Continued on page 80*

# Congress boosts termination costs

By Nicky Robertshaw

WASHINGTON — Congress just made it more expensive to terminate a pension plan.

Under the Pension Protection Act passed last month as part of the Omnibus Budget Reconciliation Act of 1987, an employer now must pay out for non-vested accrued benefits on top of vested benefits when terminating a defined benefit plan.

The law also contains a little-noticed provision that could cause a flood of pension plan amendments specifying who gets the surplus assets after a termination. Under the provision, employers that terminate plans whose documents don't specify the employer is entitled to the money must wait five years before being able to use the assets. Under the law, such amendments must be in place by Dec. 17, 1988.

Under previous law, an employer needed to cover non-vested accrued benefits only when terminating an overfunded plan and recapturing the surplus assets. Now, an employer must cover the additional benefits in every termination regardless of the plan's funded status. The only exception is when the company can show it qualifies for special hardship rules.

Ambiguous wording in the law left unclear just what employers were liable for if they wanted to end a plan. Last week, the Pension Benefit Guaranty Corp. clarified the "benefit liability" includes accrued non-vested benefits.

But pension experts say the impact of the law won't be that great because any increased obligation stemming from the non-vested benefits is offset to some degree by the reduction in the vesting period to five years from 10, which becomes effective in 1989.

"In view of the shortening of the vesting period, the effect won't be as great as it would have been otherwise," said Gerald Uslander, a principal with William M. Mercer-Meidinger-Hansen, Louisville, Ky.

Many employee benefits experts had asked the government to clarify what they see as ambiguities in the law. Still unclear is whether "benefit liabilities" include such things as death benefits, disability benefits or Social Security supplements.

The PBGC statement "clears up the vested/non-vested problem,

*Continued on page 81*

# GTE edict to 24 managers

## Perform or reduce fees

By Jacqueline Dutton

STAMFORD, Conn. — GTE Corp.'s 24 domestic equity managers have been given an ultimatum: Live up to promised returns, or fees will be cut.

The edict was issued last month by John Carroll, president of GTE Investment Corp., which oversees the $11 billion GTE pension and savings plans in Stamford, Conn.

Domestic equity management fees will be based on rolling three-year compound annualized performance figures; managers that don't outperform a specified benchmark by 200 basis points won't get their base fees. Nine GTE managers already are working under a new fee structure, and negotiations are continuing with the remainder.

GTE is believed to be the first corporate pension fund to place all of its equity managers on performance-based fees, although more are expected to follow in reaction to disappointing returns last year.

"It's my judgment that the list of managers who did what they said they would do over time is not very long," Mr. Carroll said.

Although some of GTE's managers expressed concern about how the plan would work, Mr. Carroll said none refused to participate and some have similar arrangements with other clients.

"Maybe the way to view it is that instead of paying for a promise, they will pay for results," said John J. Nagorniak, president of Franklin Portfolio Associates Inc., Boston. He would not release the size of the GTE portfolio.

Franklin Portfolio is one of the managers negotiating its entrance into the fee program this year, with performance linked to the Standard & Poor's 500 stock index. Mr. Nagorniak said he has no problem with adopting a schedule because similar arrangements with other funds have worked well.

BMI Capital Corp., New York, entered the program Jan. 1. Frank Houghton, chairman of the firm, said a strong feature of the GTE program is the use of normal portfolios as benchmarks, which he prefers to the S&P 500 because BMI specializes in small- to medium-capitalization stocks and emphasizes growth. It could not be learned how much BMI manages for GTE.

**"It's my judgment that the list of managers who did what they said they would do over time is not very long."**
**—John Carroll GTE**

Mr. Carroll said performance-linked fees won't make his managers any better at handling their portfolios, nor will it necessarily save money (although a pilot program did just that).

Instead, he said, this arrangement will be more equitable, giving more to the best performers and not rewarding underperformers. "We'd rather reward the guy who did better. Even if the same amount (in fees) is paid, we will have paid them out more fairly," Mr. Carroll said.

"One of the ironies is that you have a lot of managers doing the same thing for you but they are all charging different fees," he said.

As with most performance-linked fee arrangements, GTE will base fees on the number of basis points the manager adds to a hypothetical, passively managed benchmark portfolio, also known as a normal mix, which is designed to match the manager's particular style.

The amount value managers must add to

*Continued on page 87*

# In the spotlight:

## Mitchell Hutchins gains visibility in acquisition of MHIC

NEW YORK — Mitchell Hutchins Asset Management, the investment management arm of PaineWebber Inc. and a virtual unknown in pension management, gained immediate visibility when it bought Manufacturers Hanover Investment Corp. for $27 million early this month.

Part of the visibility came from the relatively low price Mitchell Hutchins paid for MHIC's $21 billion in assets, and part from the size of the assets it gained.

Although Mitchell Hutchins had $16 billion under management before the acquisition, only $1.5 billion of that was for tax-exempt clients, mostly acquired during the past two years.

Now it has added the $21 billion of assets managed by MHIC, which will become a separate, but not independent, part of Mitchell Hutchins, with a new name: Mitchell Hutchins Institutional Investment.

Ed Allinson, president, and Cheryl Gruetzmacher, managing director, of Mitchell Hutchins, decided to buy MHIC because the fit was right and the price was right.

Most of the MHIC assets are fixed-income assets, while most of Mitchell Hutchins' assets are equity assets. And Mitchell Hutchins paid less than 1.5 times revenue for the $21 billion in assets, analysts estimated, a low price by industry standards.

"We had a chance to (grow in the institutional business) ourselves, or acquire a firm," said Mr. Allinson. When Mitchell Hutchins was able to buy MHIC for $26 million, it made sense to do the acquisition, he said.

**Cheryl Gruetzmacher, managing director, and Ed Allinson, president, of Mitchell Hutchins, decided to buy the Manufacturers Hanover unit because the fit — and price — were right.**

Although Mr. Allinson would not confirm it, Manufacturers Hanover reportedly expected to get $50 million for the investment management unit when it put it on the block late in 1987.

Ms. Gruetzmacher believes MHIC's investment strengths fit well with Mitchell Hutchins' strengths.

Mitchell Hutchins has strong equity investment management, she said, offering an active core approach that focuses on large-capitalization, growth-oriented stocks. The portfolios have a beta of about 1.1 and the turnover is low, only about 40% per year. (Beta is a measure of risk. A portfolio with a beta of

*Continued on page 87*

Photo by Arnie Adler

**The sale of Manufacturers Hanover Investment Corp. to Mitchell Hutchins Asset Management has given Mitchell Hutchins a needed boost of visibility in the tax-exempt investment community.**

# LBO drawing power

## Plans make commitments of $1 billion

By Jacqueline Dutton

Although pension plans liquidated some older leveraged buy-out investments in 1987, they committed more money — at least $1 billion — to buy-outs through new pledges.

Statistics from *Pensions & Investment Age*'s survey of the nation's 200 largest pension funds show most were net liquidators of leveraged buy-out assets in 1987.

But the increased commitment to leveraged buy-outs for 1988 has bolstered the capital reserve of the superfunds, such as the $5.6 billion Kohlberg Kravis Roberts & Co. fund, which has several deals in the works.

Executives of the funds that poured more money into buy-outs in 1987 said they did so to meet target allocations, or as part of an ongoing plan to increase investments to that area.

They weren't anticipating the returns they enjoyed when the stock market was at its peak, nor were they trying to take advantage of lower prices.

For example, the $365 million Avon Products Inc. fund, New York, increased its commitment to leveraged buy-outs to $38 million from $23 million during November to maintain a 10% allocation, said Helmuth Fandl, vice president-pension asset management and insurance. KKR received $10 million and the Blackstone Group LBO fund, $5 million.

"We still feel positive about the strategy," said Edgar Cheney, director-pension investments for the $6.9 billion United Technologies Corp. fund, Hartford, Conn. Mr. Cheney said the fund raised its commitment to $200 million from $70 million during 1987.

Had United Technologies made the bigger commitment earlier, it could have lost valuable returns on then-expensive investments when stock prices plummeted Oct. 19 and deals subsequently fell apart.

"We weren't into market timing," Mr. Cheney said, "but at the time, there were a lot of good partnerships out there."

An even more dramatic example is the $430 million commit-

*Continued on page 88*

# Funds take harder line

## Purse strings tightened

By Barry B. Burr

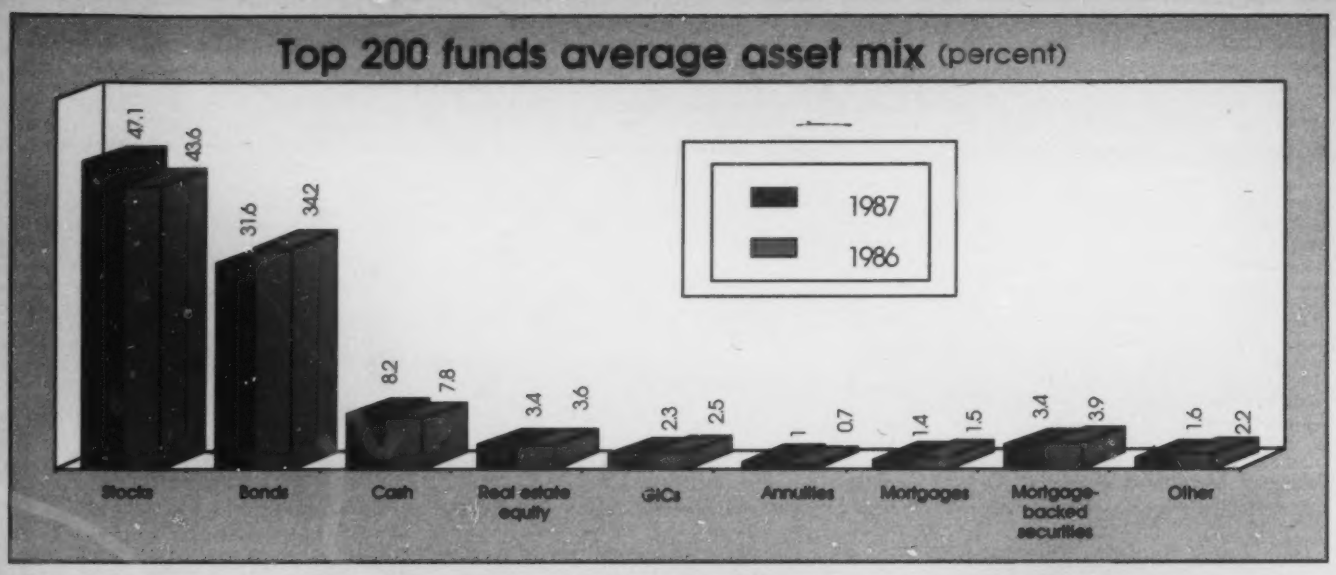
Pension sponsors intend to get tougher on the investment management fees charged by their money managers, a sampling of corporate executives shows.

The $11 billion GTE Corp. fund is placing all its domestic equity managers on such a schedule (*see accompanying story*).

The $1.5 billion defined benefit fund of Goodyear Tire & Rubber Co., Akron, Ohio, might place its managers on performance-fee schedules. And the pension committee of the $4.5 billion fund of

*Continued on page 86*

1,000 FUNDS




# Top 200 ranks reflect corporate alterations

By Jacqueline Dutton

Pension plan terminations and restructurings caused some big changes in *Pensions & Investment Age*'s ranking of the nation's Top 200 employee benefit plans.

Among the biggest names to drop from the list was The LTV Corp., Dallas, which had four plans terminated in late 1986 and early 1987. As of Sept. 30, LTV reported $859 million in assets, to rank 305th. The Pension Benefit Guaranty Corp., however, has moved to reinstate three of the plans to LTV, sparking a legal battle.

The Dart & Kraft Inc. plan, Northbrook, Ill., which ranked 131st in 1986 with $1.9 billion in total assets, was split up during a company restructuring in which all non-food divisions were spun off into Premark International. Premark took approximately one-fifth of the Dart & Kraft assets and now ranks 506th with $478 million; the remaining four-fifths are in the Kraft Inc. plan, ranking 161st with assets of $1.7 billion.

McDermott International Inc. ranked 161st in the previous ranking, but slid off the new rankings after the New Orleans-based fund took advantage of new accounting rules that allowed the overfunded plan to buy some $500 million in annuities, according to Mich Pettyjohn, McDermott vice president. The figure no longer is reflected in the pension plan assets but now can be put on the corporate balance sheet as earnings.

The Ashland Oil Inc. fund, Ashland, Ky., fell out of the Top 200 after the company recaptured $250 million in excess plan assets and subsequently established a floor-offset plan. Ashland, which dropped to 310th place with $846 million in total assets from 199th and $1.1 billion, terminated its defined benefit plan and put most of the assets into an employee stock ownership plan and a new, much smaller companion defined benefit plan.

Two state funds that do not invest in equities fell out of the Top 200 during a year in which other public plans achieved meteoric returns on heavy allocations to the stock market. The State of West Virginia retirement systems, Charleston, grew only 2% during the year ended Sept. 30, up to $1.25-billion from $1.23 billion, dropping to 210th from 183rd. The Indiana State Teachers' Retirement Fund, Indianapolis, 179th in the previous survey, fell out similarly, ranking 202nd.

Also off the list were FMC Corp., Chicago; Cooper Industries Inc., Houston; National Intergroup Inc., Pittsburgh; and Continental Can Co., Norwalk, Conn., now known as Kiewit Continental Inc. The assets of the Conoco Inc. fund were included in this year's E.I. du Pont de Nemours & Co. listing.

The Georgia State Retirement Systems, Atlanta, 31st in the previous survey with $8.3 billion in total assets, were listed separately this time. The Georgia Teachers' Retirement System ranked 48th with $7 billion in assets, and The Georgia Employees' Retirement System ranked 104th with $2.8 billion.

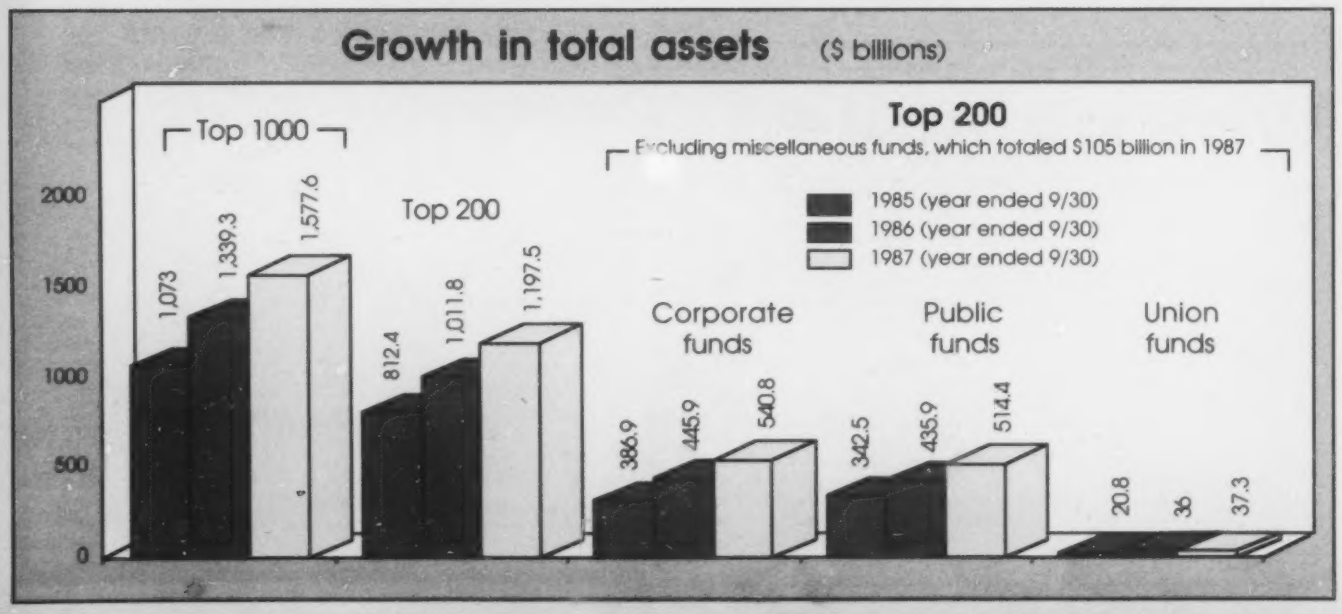
New to this year's list were funds that just missed out on previous Top 200 previous ranking, plus a couple of growing firms — Digital Equipment Corp., Acton, Mass., and Merck & Co. Inc., Rahway, N.J.

Digital, ranked 197th with $1.3 billion in assets; it rose 64 notches after reporting $928 million in assets as of Sept. 30, 1986.

A. Raymond Schmalz, manager-U.S. pension fund, credits the ratings boost to Digital's rapid growth — he said contributions and participants are growing steadily each year — and a successful investment program, which included a heavy stock weighting for most of 1987.

Among those that just missed the previous listing are American Electric Power Co., Columbus, Ohio, at 182nd with $1.5 billion; Pacific Lighting Corp., Los Angeles, at 196th with $1.3 billion; North American Philips Corp., New York, 195th with $1.3 billion; The Times-Mirror Co., Los Angeles, 193rd with $1.3 billion; and the Maine State Retirement System, Augusta, 189th with $1.4 billion.

*Continued on page 57*




# Bond funds return strong

By Joel Chernoff

While some of the nation's largest pension funds unwound their dedicated bond portfolios last year, the trend toward creating such portfolios picked up steam, experts said.

The creation of a $4 billion dedicated bond portfolio by the Maryland State Retirement and Pension Systems, Baltimore, this fall was the largest program done in recent times, and marks renewed interest in the product.

The $8 billion Maryland system switched "when we came to the conclusion that long bonds would meet our objective with more certainty than any other vehicle," said Bennett Shaver, secretary.

In addition, other Top 200 pension funds added to existing dedicated bond portfolios. Southwestern Bell Corp., St. Louis, moved $600 million into its portfolio from stocks and bonds to cover liabilities for employees who retired in 1985 and 1986, said Roger Wohlert, assistant treasurer-corporate finance. And the Minnesota State Board of Investment, St. Paul, added about $700 million to its portfolio to cover new retirees, said Howard Bicker, executive director.

Interest in dedicated bond funds had waned from their popularity peak in the early and mid-1980s. Part of their great appeal at that time was they enabled corporate pension fund executives to set up high-yielding portfolios while lowering corporate pension contributions.

The portfolios match bond cash flows with an expected stream of liabilities, usually those for retirees. Because the yields are locked in, plan sponsors were able to build those higher rates into their actuarial rate of return assumptions.

But the adoption of the Financial Accounting Standards Board's Statement 87 on pension accounting rules eliminated the bookkeeping advantage, because now current market rates are used for valuing assets.

(An immunized bond portfolio, a form of dedication, involves matching the duration of a bond portfolio against the duration of liabilities to protect against interest-rate fluctuations, but does not involve matching cash flow with liability streams.)

The move toward dedications surprised some professionals.

Martin L. Leibowitz, managing director at Salomon Brothers Inc.'s bond portfolio analysis group, had predicted last spring a high percentage of such portfolios would be liquidated (*Pensions & Investment Age*, March 23).

"What we did not fully foresee was that dedications serve another purpose," he said. The portfolios provide a "comfort level" to various parties, such as plan participants and corporations, by providing a "reliable, well-defined, quality and secure process," he explained.

"Dedication has in fact had a

*Continued on page 57*

# Indexers most popular

By Marlene Givant

Although teen-agers will attest that measuring popularity isn't easy, in the case of money managers, the task is straightforward.

According to results of *Pensions & Investment Age*'s survey of the nation's largest employee benefit funds, indexers were the most widely used managers in several categories.

Of the 647 managers used by the nation's largest pension funds, the most widely used managers overall were J.P. Morgan Investment Management Inc., New York, claiming 62 clients among the Top 200.

Prudential Asset Management Group, Newark, N.J., had 57 clients.

Bankers Trust Co. — Investment Management Group, New York, a major index player, had 52 clients.

Aetna Life Insurance Co., Hartford, Conn., boasted 45 clients, and Trust Co. of the West, Los Angeles, had 44.

"All of the top five overall have been aggressive developers of new products," said Ronald A. Jones, partner with Hewitt Associates, Lincolnshire, Ill.

"They looked for a need and sought to fill it or developed demand for a product by offering one."

He cited as an example Bankers Trust, which capitalized on the apparent demand for passive products.

The managers that fill out the list of the 10 most-used management firms include three that have been successful at attracting clients for passive management.

Wells Fargo Investment Advisors, San Francisco, was used by 43 of the Top 200 funds.

Mellon Capital Management, San Francisco, had 42 clients.

And Alliance Capital Management, New York, which also ranked as the favorite equity manager, was next with 41 clients.

Jennison Associates Capital, New York, ranked ninth with 34 clients.

Jennison was followed by Equitable Capital Management Corp., New York, and Pacific Investment Management Co., Newport Beach, Calif., the top fixed-income manager, which tied for 10th place with 33 clients each.

The managers among the Top 10 overall often were repeaters in several categories.

Morgan ranked 10th among real estate managers; second among bond managers and tied for eighth among equity managers.

Prudential was top in real estate and third in GICs (with Aetna).

Bankers Trust ranked ninth for bonds (with State Street Research & Management Co., Boston), second for cash and short-term assets (along with Discount Corp. of New York Advisers, New York and Mellon) and fourth for equities.

Aetna was fourth for real estate (with Equitable) and third for GICs (with Prudential).

And TCW was third among balanced managers and tied for second with JMB Institutional Realty, Chicago, for real estate.

Mellon ranked second (along with Bankers and Discount Corp.) for cash and short-term assets and fifth for equities (in a tie with Delaware Investment Advisers, Philadelphia).

Wells Fargo and Equitable were among the top managers for only one category outside overall management.

Wells ranked third for equities while Equitable was fourth (along with Aetna) in real estate.

Only Jennison ranked among the Top 10 overall without gaining that distinction in a separate category.

The top international managers were not singled out because some funds responding to the Top 200 survey did not distinguish international from domestic equity managers.

The Top 200 funds reported using 87 real estate managers and 26 GIC managers, but only 33 balanced managers and 22 cash and short-term managers.

As for staple assets, funds used 157 bond managers and more than double that amount — 347 — equity managers.

Five of the top managers overall ranked among the top equity managers.

By number of clients, the most used equity managers was Alliance, with 34.

Following Alliance was Capital Guardian Trust Co., Los Angeles, with 32.

Wells Fargo was next with 26.

Following Wells Fargo was Bankers Trust, with 24.

Mellon and Delaware were next, tied with 19.

INVESCO Capital Management, Atlanta, was next with 18.

Trinity Investment Management Corp., Boston, and J.P. Morgan followed, tied at 17.

And Batterymarch Financial Management and State Street Research & Management Co., both in Boston, were next, tied at 16.

Alliance was No. 1 in equities despite its specialty in growth stocks, which have underperformed the market for several years.

And Batterymarch still is popular even though it lost a number of clients in 1987 because of poor performance (*P&I Age*, May 4).

The leading bond manager was PIMCO, with 28 clients. J.P. Morgan was second, with 23. Criterion Group, Houston, was third with 14. Loomis, Sayles & Co. Inc., Boston, was fourth, with 13.

Tied for the next spot with 12 clients each were Lehman Management Co., New York; MacKay-Shields Financial Corp., New York, and Miller, Anderson and Sherrerd, Bala Cynwyd, Pa.

Fischer, Francis, Trees & Watts Inc., New York, were ranked next among bond managers, with 11 clients. And Bankers Trust and State Street Research were tied with 10 clients.

The top equity and bond managers were for the most part seasoned firms.

"They're what I call long-term survivors; not always on top (in performance) but for the most part survivors by not failing," Mr. Jones said.

Trinity is one exception because it's a relative newcomer with about five or six years as a large, aggressive firm, he added.

The real estate list, longer than the rest because of many ties among rankings, was led by Prudential, which had 31 clients. TCW and JMB followed, with 30; Aetna, Equitable and The RREEF Funds, San Francisco, with 27; LaSalle Advisors Ltd., Chicago, with 14; and Heitman Advisory Corp., Chicago; and Security Capital Real Estate Corp., New York, with 13.

Four firms tied for 10th place, with 11 clients each: Aldrich, Eastman & Waltch, Boston; Coldwell Banker, Los Angeles; Copley Real Estate Advisors, Boston; and J.P. Morgan.

John Hancock Financial Services, Boston, and Metropolitan Life Insurance Co., New York, headed the GIC team, with six clients.

They were followed by Aetna and Prudential with five clients; The Travelers Cos., Hartford, Conn., with three; and The New England, Boston, and New York Life Insurance Co., New York, with two.

The top three balanced managers were The Boston Co. Inc., Boston; Loomis, Sayles; and TCW. ■

### Top managers overall

| Manager | # funds using |
|---|---|
| J.P. Morgan | 62 |
| Prudential | 57 |
| Bankers Trust | 52 |
| Aetna | 45 |
| TCW | 44 |

### Top equity managers

| Manager | # funds using |
|---|---|
| Alliance | 34 |
| Capital Guardian | 32 |
| Wells Fargo | 26 |
| Bankers Trust | 24 |
| Mellon | 19 |
| Delaware | 19 |

### Top bond managers

| Manager | # funds using |
|---|---|
| Pacific Investment | 28 |
| J.P. Morgan | 23 |
| Criterion | 14 |
| Loomis, Sayles | 13 |
| Lehman | 12 |
| MacKay-Shields | 12 |
| Miller, Anderson & Sherrerd | 12 |

## Profile statistics at a glance*

($ billions)

| | 1987 | 1986 |
|---|---|---|
| Top 1,000 assets | 1,577.6 | 1,339.3 |
| Top 200 assets | 1,197.5 | 1,011.8 |
| Top 100 assets | 1,002.4 | 845.7 |
| Top 50 assets | 794.2 | 660.1 |
| Top 25 assets | 582.0 | 479.3 |
| Top 200 defined benefit | 984.9 | 831.1 |
| Top 200 defined contribution | 104.2 | 92.2 |
| Top 200 profit-sharing | 19.1 | 17.4 |
| Top 200 thrift/401(k) | 67.6 | 58.1 |

## Top 200 fund statistics

($ billions)

| | 1987 | 1986 |
|---|---|---|
| Internal mgmt.** | 475.8 | 411.9 |
| Internally managed equities | 192.6 | |
| Internally managed fixed | 206.2 | |
| Internally managed short-term | 38.6 | |
| Internally managed other | 25.8 | |
| Stock index funds | 141.3 | 108.9 |
| Internally managed indexed equities | 63.0 | |
| Bond index funds | 45.0 | 13.8 |
| Internally managed indexed fixed | 2.7 | |
| Real estate equity | 28.0 | 26.2 |
| Mortgages | 31.2 | 30.3 |
| Mortgage-backed securities | 49.9 | 50.5 |
| GICs | 8.8 | 10.5 |
| Overseas | 31.9 | 24.5 |
| Overseas - equity | 26.3 | |
| Overseas - fixed | 4.5 | |
| Overseas- other | 1.1 | |
| Venture capital | 2.9 | 3.3 |
| Dedication/immunization | 24.6 | 29.4 |
| Oil & gas | 1.3 | 0.8 |
| LBOs | 3.7 | 2.8 |
| Contributions paid | 40.1 | 40.3 |
| Benefits paid | 38.2 | 36.9 |
| Portfolio insurance | 7.3 | 8.6 |
| Private placements | 19.6 | NA |

## Number of top 200 funds using alternative investments

| | 1987 | 1986 |
|---|---|---|
| Internal mgmt. | 125 | 121 |
| Stock index funds | 105 | 100 |
| Bond index funds | 41 | 32 |
| Real estate equity | 134 | 130 |
| Mortgages | 60 | 63 |
| Mortgage-backed securities | 86 | 98 |
| GICs | 48 | 62 |
| Overseas | 94 | 93 |
| Venture capital | 72 | 75 |
| Dedication/immunization | 27 | 37 |
| Oil & gas | 22 | 22 |
| LBOs | 22 | 26 |
| Stock index futures | 72 | 63 |
| Fixed-income futures | 46 | 46 |
| Stock options | 65 | 62 |
| Fixed-income options | 19 | 22 |
| Portfolio insurance | 13 | 19 |
| Private placements | 44 | NA |

* Based on pension assets, not total assets
** Total is greater because some funds did not break out assets

## How it was compiled

The information on employee benefit funds contained in this issue was developed in several steps.

Questionnaires were sent to the more than 1,200 funds in *Pensions & Investment Age*'s data base. The largest 200 and largest 1,000 were identified from the completed questionnaires, follow-up telephone calls and a cross-check with information supplied by Money Market Directories Inc., publisher of the 1988 Money Market Directory of Pension Funds and Their Investment Managers.

The more detailed information contained in the profiles of the 200 largest funds was obtained from the completed questionnaires, interviews with fund officials and articles published in *P&I Age*.

In most cases, the information reflects fund operations as of Sept. 30, 1987.

In cases where the fund supplied data considered too dated, *P&I Age* estimated the asset growth based on one of the following methods: the asset mix the fund supplied for last year's survey; the asset mix reported in Money Market Directory; or *P&I Age*'s reported average asset mix for the type of fund, i.e., union, corporate or public.

Where no information was available from the fund, statistics were taken from the 1988 Money Market Directory.

In the tables accompanying the profiles, all figures except for internal management and defined contribution plans are based on defined benefit assets. The asset mixes for the Top 200 and Bottom 800 funds represent the average of all reported mixes for the respective funds. NA (not available) was applied to funds that had less than $1 million allocated to the particular investment as well as to funds that could not provide a breakout of assets but are known to invest in those areas. Dollar amounts in all charts were rounded to the nearest million.

# A rocky ride in '87

## PBGC on roller coaster with liabilities, personnel

By Nicky Robertshaw

WASHINGTON — The Pension Benefit Guaranty Corp. saw its liabilities seesaw in the 12 months ended Sept. 30.

With the arrival and subsequent departure of nearly $2 billion in liabilities from three underfunded plans of The LTV Corp., the Pension Benefit Guaranty Corp.'s liability soared to $3.8 billion, then dropped below the $2 billion mark by Sept. 30.

Although final figures are not available, the PBGC estimates that if the courts uphold the restoration of the three plans to LTV, the total liability will be somewhat less than $2 billion. The final home of the plans will be decided by U.S. District Court in New York.

PBGC officials would not release the size of the agency's assets as of Sept. 30. Although officials would not be specific, *Pensions & Investment Age* estimates the PBGC lost $146 million in October because of the market turmoil. Post-crash and without LTV, *P&I Age* estimates assets of the agency at $2 billion.

Noting the year started with grave problems for the PBGC and threats to its well-being, Executive Director Kathleen P. Utgoff called 1987 a "pivotal year" that ended with the situation significantly improved.

She pointed to the restoration of the LTV funds as helping reverse a trend in terminations of large, unfunded pension plans, such as those of Wheeling-Pittsburgh Corp. and Allis-Chalmers Corp. in 1986. In addition, provisions of the Budget Reconciliation Act of 1987 not only would reduce the liabilities in plans that are terminated in the future, but also could make companies less likely to terminate.

It also was a pivotal year in terms of fund personnel, as the two top investment officers left the PBGC in late 1987. They have not yet been replaced.

Jay A. Jupiter, who had been investment management director for the financial operations division of the PBGC, moved to the Federal Home Loan Bank Board as deputy director of its mergers and acquisitions program in October.

Julie H. Shriver, who was manager of the investment management division, left in December to become an investment officer for the International Monetary Fund staff retirement plan.

As a result, Larry Maslin, director of the financial operations department, is temporarily in charge of investments as acting director of the investment management division.

Wilshire Associates, Santa Monica, Calif., which was hired earlier this year, will help with overall managerial advice and investment guidance.

Except for the five farm equity managers hired a year ago — Disciplined Investment Advisors, Evanston, Ill; Furman Selz Capital Management Inc., New York; Loomis, Sayles & Co. Inc., Pasadena, Calif.; J.P. Morgan Investment Management Inc., New York; Nelson, Benson & Zellmer Inc., Denver — there have not been any other additions to the PBGC's money managers.

Its other managers are, for equities: American National Bank & Trust of Chicago; Chase Investors Management Corp., New York; Dimensional Fund Advisors, Santa Monica, Calif.; First RepublicBank, Dallas; Lazard Freres Asset Management, New York; Lehman Management Co., New York; McCowan Associates Inc., New York; and United Capital Management, Denver.

Its bond managers are Pacific Investment Management Co., Newport Beach, Calif., and Morgan Stanley Asset Management, New York.

State Street Bank and Manufacturers Hanover serve as master trustees. ■

# Bond indexing booms

By Trudy Ring

Bond indexing by the nation's largest pension funds soared in the year ended Sept. 30, while stock index funds, after allowing for market gain, showed a net loss of assets.

Of the Top 200 funds, 41 reported using bond index funds, with a total of $45 billion in the strategy, including $2.7 billion run in-house. A year ago, 32 funds had indexed bonds, with $13.8 billion invested.

In the 12 months ended Sept. 30, the Shearson Lehman Government/Corporate bond index was down 0.4%; this would have brought the 1987 figure to $13.75 billion without new contributions. Using that as a base, the assets in indexed bonds grew 227% in the year ended Sept. 30.

As of Sept. 30, 105 of the Top 200 funds reported using indexed stocks, with $141.3 billion invested, including $62.97 billion run in-house. A year earlier, 100 funds reported $108.9 billion in indexed stocks.

The 43.5% gain of the Standard & Poor's 500 stock index in the 12-month period would have brought the 1987 figure to $156.3 billion without new contributions — so, assets in stock index funds actually decreased 9.6%. At least part of the decrease can be accounted for in funds not revealing the amount of their indexation.

The indexed bond surge largely was because of public funds. The $33.6 billion New York City Retirement Systems continued restructuring their bonds, raising their indexed total to $18.31 billion from $458 million a year earlier.

The $23.7 billion California State Teachers' Retirement System, Sacramento, moved fixed income assets to indexation from active management, preparatory to bringing it in-house. It had $5.8 billion in bond index funds as of Sept. 30; last year it reported none.

The $8.5 billion Exxon Corp. pension fund, New York, and the $3.2 billion Mississippi Public Employees' Retirement System, Jackson, both completed expected moves in increasing their bond index funds. Exxon's rose 61.8%, to $377 million, while Mississippi's increased 58%, to $980 million.

Stock indexing had at least one major dropout, while another cut back indexed stocks to harvest gains.

The $44 billion California Public Employees' Retirement System, Sacramento, eliminated a $5.5 billion S&P 500 fund and put the assets in six core portfolios that are managed passively, but not indexed.

The $8.2 billion Maryland State Retirement and Pension Systems, Baltimore, sold $2.3 billion in indexed stocks in late September, using the proceeds to fund a portion of a $4 billion dedicated bond portfolio. As of Sept. 30, Maryland's indexed stocks stood at $1.91 billion, down from $2.7 billion a year earlier. ■

## Top 200 asset mix

### Corporate

| | 1987 % | 1986 % |
|---|---|---|
| Stocks | 54.5 | 50.1 |
| Bonds | 23.9 | 27.7 |
| Cash | 8.2 | 7.9 |
| Real estate equity | 4.2 | 4.5 |
| GICs | 3.6 | 3.4 |
| Annuities | 1.7 | 1.3 |
| Mortgages | 0.6 | 0.5 |
| Mortgage-backed securities | 0.9 | 1.0 |
| Other* | 2.4 | 3.6 |

### Public

| | 1987 % | 1986 % |
|---|---|---|
| Stocks | 39.0 | 33.4 |
| Bonds | 40.3 | 44.2 |
| Cash | 8.2 | 7.8 |
| Real estate equity | 2.5 | 2.3 |
| GICs | 0.4 | 0.4 |
| Annuities | 0 | 0 |
| Mortgages | 2.2 | 2.9 |
| Mortgage-backed securities | 6.6 | 8.3 |
| Other* | 0.8 | 0.7 |

### Union

| | 1987 % | 1986 % |
|---|---|---|
| Stocks | 38.0 | 36.1 |
| Bonds | 39.0 | 39.2 |
| Cash | 10.1 | 7.9 |
| Real estate equity | 3.9 | 3.9 |
| GICs | 1.8 | 2.9 |
| Annuities | 2.4 | 0 |
| Mortgages | 1.7 | 1.6 |
| Mortgage-backed securities | 1.7 | 4 |
| Other* | 1.4 | 4.4 |

* Other includes venture capital, oil and gas and miscellaneous investments.

## Bottom 800 asset mix

### Aggregate[1]

| | 1987 % |
|---|---|
| Stocks | 44.4 |
| Bonds | 29.8 |
| Cash | 10.4 |
| Real estate equity | 3.0 |
| Mortgages | 1.3 |
| Mortgage-backed securities | 2.1 |
| GICs | 3.5 |
| International | 2.4 |
| Annuities | 1.2 |
| Venture capital | 0.5 |
| Oil & gas | 0 |
| LBOs | 0 |
| Private placements | 0.3 |
| Other | 1.1 |

### Corporate

| | 1987 % | 1986 % |
|---|---|---|
| Stocks | 50.8 | 49.9 |
| Bonds | 23.2 | 25.8 |
| Cash | 10.4 | 10.0 |
| Real estate equity | 3.1 | 3.8 |
| Mortgages | 0.4 | * |
| Mortgage-backed securities | 0.8 | 0.7 |
| GICs | 4.9 | 5.1 |
| International | 3.1 | 2.5 |
| Annuities | 1.6 | * |
| Venture capital | 0.6 | 0.4 |
| Oil & gas | 0.1 | 0.1 |
| LBOs | 0 | * |
| Private placements | 0.3 | * |
| Other | 0.7 | 1.4 |
| Options | NA | 0.1 |
| Futures | NA | 0.2 |

### Public

| | 1987 % | 1986 % |
|---|---|---|
| Stocks | 48.2 | 37.4 |
| Bonds | 26.3 | 38.0 |
| Cash | 10.5 | 11.2 |
| Real estate equity | 3.0 | 3.6 |
| Mortgages | 0.9 | * |
| Mortgage-backed securities | 1.3 | 3.7 |
| GICs | 4.0 | 1.2 |
| International | 2.9 | 0.4 |
| Annuities | 1.3 | * |
| Venture capital | 0.6 | 0.2 |
| Oil & gas | 0 | 0 |
| LBOs | 0 | * |
| Private placements | 0.3 | * |
| Other | 0.7 | 4.2 |
| Options | NA | 0.1 |
| Futures | NA | 0 |

### Union

| | 1987 % | 1986 % |
|---|---|---|
| Stocks | 31.0 | 29.5 |
| Bonds | 39.2 | 37.6 |
| Cash | 9.5 | 10.3 |
| Real estate equity | 3.5 | 4.0 |
| Mortgages | 2.2 | * |
| Mortgage-backed securities | 4.8 | 7.1 |
| GICs | 3.7 | 5.7 |
| International | 0.4 | 0.4 |
| Annuities | 1.5 | * |
| Venture capital | 0.1 | 0.2 |
| Oil & gas | 0 | 0 |
| LBOs | 0 | * |
| Private placements | 0.5 | * |
| Other | 3.6 | 5.0 |
| Options | NA | 0.2 |
| Futures | NA | 0 |

* included in other
[1] 1986 aggregate data not available

# Top 200 pension funds/sponsors

## Assets in $ millions

| | | |
|---|---|---|
| 1. TIAA-CREF | 66,171 | |
| 2. California Public Employees' | 44,036 | |
| 3. General Motors | 40,000 | |
| 4. New York State/Local | 38,747 | |
| 5. AT&T | 37,577 | |
| 6. N.Y.C. Retirement Systems | 33,633 | |
| 7. General Electric | 27,300 | |
| 8. California State Teachers | 23,714 | |
| 9. New York State Teachers | 23,035 | |
| 10. IBM | 22,457 | |
| 11. Ford Motor | 19,800 | |
| 12. N.J. Division of Investment | 19,785 | |
| 13. Texas Teachers | 18,930 | |
| 14. E.I. du Pont de Nemours | 16,868 | |
| 15. Michigan State | 16,680 | |
| 16. Wisconsin Investment Board | 15,632 | |
| 17. Ohio Public Employees | 14,985 | |
| 18. Ohio Teachers Retirement | 14,821 | |
| 19. NYNEX | 14,336 | |
| 20. Florida Board of Administration | 13,700 | |
| 21. Ameritech | 12,592 | |
| 22. North Carolina Retirement | 12,446 | |
| 23. Pennsylvania School Employes | 12,021 | |
| 24. Bell Atlantic | 11,502 | |
| 25. University of California | 11,228 | |
| 26. GTE | 11,065 | |
| 27. Washington Investment Board | 10,600 | |
| 28. USX | 10,150 | |
| 29. BellSouth | 10,070 | |
| 30. Pacific Telesis Group | 9,867 | |
| 31. Minnesota State Board | 9,706 | |
| 32. Rockwell International | 9,200 | |
| 33. Oregon Public Employes | 8,789 | |
| 34. Exxon | 8,505 | |
| 35. Teamsters, Central States | 8,482 | |
| 36. Maryland State Retirement | 8,274 | |
| 37. Eastman Kodak | 8,264 | |
| 38. Los Angeles County | 8,262 | |
| 39. Sears, Roebuck | 8,225 | |
| 40. U S WEST | 8,046 | |
| 41. Lockheed | 8,025 | |
| 42. Pennsylvania State Employes' | 7,965 | |
| 43. Colorado Public Employees' | 7,802 | |
| 44. Virginia Supplemental Retirement | 7,610 | |
| 45. Western Conference of Teamsters | 7,524 | |
| 46. United Nations Joint Staff | 7,428 | |
| 47. Southwestern Bell | 7,231 | |
| 48. Georgia Teachers Retirement | 7,080 | |
| 49. Illinois Teachers' Retirement | 7,053 | |
| 50. United Technologies | 6,946 | |
| 51. Shell Oil | 6,918 | |
| 52. Allied-Signal | 6,808 | |
| 53. McDonnell Douglas | 6,800 | |
| 54. Boeing | 6,538 | |
| 55. Alabama Retirement Systems | 6,233 | |
| 56. Arizona State Retirement System | 6,182 | |
| 57. Tennessee Consolidated | 6,132 | |
| 58. Chevron | 5,831 | |
| 59. Connecticut Trust Funds | 5,736 | |
| 60. Hughes Aircraft | 5,400 | |
| 61. South Carolina Retirement | 5,171 | |
| 62. Westinghouse Electric | 4,976 | |
| 63. UMWA Health & Retirement | 4,825 | |
| 64. General Dynamics | 4,800 | |
| 65. Texas Employees Retirement | 4,792 | |
| 66. Unisys | 4,691 | |
| 67. Caterpillar | 4,423 | |
| 68. Mobil Oil | 4,336 | |
| 69. Amoco | 4,300 | |
| 70. Monsanto | 4,300 | |
| 71. Prudential Insurance | 4,294 | |
| 72. Chrysler | 4,225 | |
| 73. Iowa Public Employees | 3,820 | |
| 74. Procter & Gamble | 3,580 | |
| 75. Pacific Gas and Electric | 3,560 | |
| 76. RJR Nabisco | 3,540 | |
| 77. Illinois Municipal Retirement | 3,536 | |
| 78. Massachusetts Board | 3,500 | |
| 79. Northrop | 3,402 | |
| 80. Hawaii State Employees | 3,400 | |
| 81. Alaska State Retirement System | 3,340 | |
| 82. Kansas Public Employees' | 3,311 | |
| 83. Chicago Teachers | 3,280 | |
| 84. Utah State Retirement Fund | 3,246 | |
| 85. Atlantic Richfield | 3,236 | |
| 86. Mississippi Public Employees | 3,218 | |
| 87. Missouri Public School | 3,196 | |
| 88. San Francisco Employees | 3,189 | |
| 89. Delta Air Lines | 3,150 | |
| 90. American Airlines | 3,130 | |
| 91. Metropolitan Life Insurance | 3,113 | |
| 92. Allegis | 3,100 | |
| 93. Aluminum Co. of America | 3,072 | |
| 94. Illinois State Universities | 3,016 | |
| 95. ITT | 3,015 | |
| 96. United Methodist Church | 2,957 | |
| 97. Detroit Retirement Systems | 2,948 | |
| 98. Dow Chemical | 2,890 | |
| 99. Textron | 2,881 | |
| 100. Consolidated Edison | 2,853 | |
| 101. Minnesota Mining & Mfg. | 2,843 | |
| 102. Martin Marietta | 2,809 | |
| 103. Grumman | 2,800 | |
| 104. Georgia Employees' Retirement | 2,770 | |
| 105. National Electrical Contractors | 2,770 | |
| 106. Los Angeles Fire & Police | 2,744 | |
| 107. Louisiana Teachers | 2,741 | |
| 108. Xerox | 2,734 | |
| 109. Bethlehem Steel | 2,699 | |
| 110. General Foods | 2,676 | |
| 111. J.C. Penney | 2,663 | |
| 112. Kentucky Teachers' | 2,656 | |
| 113. Tenneco | 2,635 | |
| 114. Illinois Board of Investment | 2,600 | |
| 115. World Bank | 2,600 | |
| 116. Tennessee Valley Authority | 2,574 | |
| 117. Trans World Airlines | 2,571 | |
| 118. Eastern Air Lines | 2,565 | |
| 119. Kentucky Retirement Systems | 2,556 | |
| 120. Southern | 2,550 | |
| 121. Nevada Public Employees' | 2,515 | |
| 122. Ohio Police & Firemen | 2,502 | |
| 123. International Paper | 2,500 | |
| 124. Raytheon | 2,455 | |
| 125. Ohio School Employees | 2,409 | |
| 126. Texaco | 2,400 | |
| 127. Deere | 2,346 | |
| 128. Honeywell | 2,299 | |
| 129. Aetna Life & Casualty | 2,294 | |
| 130. Boilermaker Blacksmith | 2,230 | |
| 131. Owens-Illinois | 2,230 | |
| 132. TRW | 2,228 | |
| 133. Pension Reserves Board | 2,202 | |
| 134. Indiana Public Employees' | 2,158 | |
| 135. Presbyterian Church (U.S.A.) | 2,122 | |
| 136. Los Angeles City Employees | 2,101 | |
| 137. Southern Baptist Convention | 2,061 | |
| 138. Southern California Edison | 2,060 | |
| 139. National Rural Electric | 2,048 | |
| 140. Citicorp | 2,035 | |
| 141. Halliburton | 2,023 | |
| 142. Sun | 2,010 | |
| 143. Bakery & Confectionery Union | 2,000 | |
| 144. Armco | 1,964 | |
| 145. Commonwealth Edison | 1,951 | |
| 146. Standard Oil | 1,946 | |
| 147. Louisiana State Employees' | 1,944 | |
| 148. Philip Morris | 1,892 | |
| 149. Eli Lilly | 1,875 | |
| 150. Inland Steel Industries | 1,840 | |
| 151. Travelers Insurance | 1,823 | |
| 152. Rhode Island Employees' | 1,809 | |
| 153. PPG Industries | 1,800 | |
| 154. Hospital and Health Care Employees | 1,797 | |
| 155. Goodyear Tire & Rubber | 1,783 | |
| 156. Gencorp | 1,777 | |
| 157. Arkansas Teacher Retirement | 1,774 | |
| 158. Florida Power & Light | 1,746 | |
| 159. Okla. Teachers' Retirement | 1,735 | |
| 160. International Operating Engineers | 1,718 | |
| 161. Kraft | 1,710 | |
| 162. Southern New England Telephone | 1,700 | |
| 163. Abbott Laboratories | 1,680 | |
| 164. Union Carbide | 1,663 | |
| 165. K mart | 1,620 | |
| 166. American Stores | 1,611 | |
| 167. Navistar International | 1,606 | |
| 168. Hercules | 1,603 | |
| 169. Texas Municipal Retirement | 1,600 | |
| 170. Plumbers, National Headquarters | 1,599 | |
| 171. Philadelphia Board of Pensions | 1,587 | |
| 172. New York Life Insurance | 1,566 | |
| 173. Chicago Municipal Employees | 1,545 | |
| 174. Hewlett Packard | 1,540 | |
| 175. Houston City | 1,500 | |
| 176. Texas County & District | 1,500 | |
| 177. Episcopal Church Pension | 1,488 | |
| 178. New Mexico Educational Board | 1,482 | |
| 179. Bechtel Power | 1,478 | |
| 180. New Mexico Public Employees | 1,471 | |
| 181. Los Angeles Water and Power | 1,470 | |
| 182. American Electric Power | 1,465 | |
| 183. Southern California UFCW | 1,463 | |
| 184. IAM National Pension Fund | 1,454 | |
| 185. Pan American World Airways | 1,445 | |
| 186. Unocal | 1,405 | |
| 187. Baltimore City | 1,400 | |
| 188. Teamsters, New England | 1,392 | |
| 189. Maine State Retirement System | 1,390 | |
| 190. Merck | 1,377 | |
| 191. Motorola | 1,358 | |
| 192. Milwaukee City Employees' | 1,355 | |
| 193. Times Mirror | 1,354 | |
| 194. CIGNA | 1,351 | |
| 195. North American Philips | 1,347 | |
| 196. Pacific Lighting | 1,341 | |
| 197. Digital Equipment | 1,322 | |
| 198. Teledyne | 1,310 | |
| 199. Idaho Public Employee | 1,309 | |
| 200. Army and Air Force Exchange | 1,305 | |
| Total | 1,197,475 | |

# Ranking of funds/sponsors 201-1,000

| Rank | Fund/sponsor | Location | Assets |
|---|---|---|---|
| 201. | Delaware State | Dover | 1,300 |
| 202. | Indiana State Teachers | Indianapolis | 1,300 |
| 203. | Upjohn | Kalamazoo, Mich. | 1,300 |
| 204. | United Parcel Service | Greenwich, Conn. | 1,275 |
| 205. | John Hancock Mutual | Boston, Mass. | 1,267 |
| 206. | Michigan Municipal | Lansing | 1,263 |
| 207. | Burlington Northern | Seattle | 1,250 |
| 208. | Johnson & Johnson | New Brunswick, N.J. | 1,250 |
| 209. | Santa Fe S. Pacific | Chicago | 1,250 |
| 210. | West Virginia State | Charleston | 1,250 |
| 211. | Dun & Bradstreet | New York | 1,244 |
| 212. | Northwest Airlines | St. Paul, Minn. | 1,241 |
| 213. | BATUS | Louisville, Ky. | 1,239 |
| 214. | N. Calif. Retail Clerks | Walnut Creek | 1,239 |
| 215. | Okla. Public Employees | Oklahoma City | 1,232 |
| 216. | Occidental Petroleum | Los Angeles | 1,228 |
| 217. | American Brands | Old Grnwich, Conn. | 1,217 |
| 218. | Chicago Police | Chicago | 1,208 |
| 219. | American Bar | Chicago | 1,202 |
| 220. | Fed. Dept. Stores | Cincinnati | 1,200 |
| 221. | National Intergroup | Pittsburgh | 1,200 |
| 222. | Sheet Metal Workers | Alexandria, Va. | 1,200 |
| 223. | TU Electric | Dallas | 1,200 |
| 224. | Warner Lambert | Morris Plains, N.J. | 1,200 |
| 225. | American Cyanamid | Wayne, N.J. | 1,189 |
| 226. | Champion International | Stamford, Conn. | 1,189 |
| 227. | Texas Utilities | Dallas | 1,187 |
| 228. | Financial Institutions | White Plains, N.Y. | 1,185 |
| 229. | Sandia National Labs | Albuquerque, N.M. | 1,183 |
| 230. | Pfizer | New York | 1,177 |
| 231. | Arkansas Public | Little Rock | 1,165 |
| 232. | Colgate-Palmolive | New York | 1,164 |
| 233. | Chef Pierre | Traverse City, Mich. | 1,161 |
| 234. | United Telecom. | Kansas City, Mo. | 1,146 |
| 235. | James River | Richmond, Va. | 1,140 |
| 236. | Missouri State Empl. | Jefferson City | 1,130 |
| 237. | Op. Eng. 302/612 | Seattle | 1,128 |
| 238. | Ladies Garment Wrkrs. | New York | 1,126 |
| 239. | Philadelphia Electric | Philadelphia | 1,124 |
| 240. | FMC | Chicago | 1,121 |
| 241. | Wyoming State | Cheyenne | 1,112 |
| 242. | Litton Industries | Beverly Hills, Calif. | 1,111 |
| 243. | Duke Power | Charlotte, N.C. | 1,102 |
| 244. | CBS | New York | 1,100 |
| 245. | Cooper Industries | Houston | 1,100 |
| 246. | District of Columbia | Washington | 1,100 |
| 247. | Montana State | Helena | 1,100 |
| 248. | S. Dakota Retirement | Pierre | 1,099 |
| 249. | Rohm and Haas | Philadelphia | 1,095 |
| 250. | Plumbers Local 798 | Tulsa, Okla. | 1,090 |
| 251. | Columbia Gas System | Wilmington, Del. | 1,085 |
| 252. | N. Calif. Carpenters | Oakland | 1,080 |
| 253. | Kaiser Permanente | Oakland, Calif. | 1,075 |
| 254. | Kiewit Continental | Norwalk, Conn. | 1,070 |
| 255. | Manufacturers Hanover | New York | 1,069 |
| 256. | Crown Zellerbach | San Francisco | 1,060 |
| 257. | McDermott Int'l | New Orleans | 1,054 |
| 258. | Safeway Stores | Oakland, Calif. | 1,052 |
| 259. | SmithKline Beckman | Philadelphia | 1,051 |
| 260. | Whirlpool | Benton Har., Mich. | 1,048 |
| 261. | Bristol-Myers | New York | 1,044 |
| 262. | Cook County | Chicago | 1,032 |
| 263. | MEBA Pension | Baltimore | 1,031 |
| 264. | Scott Paper | Philadelphia | 1,030 |
| 265. | S. Calif. Carpenters | Los Angeles | 1,028 |
| 266. | New Hampshire | Concord | 1,027 |
| 267. | Hallmark Cards | Kansas City, Mo. | 1,020 |
| 268. | Public Service Electric | Newark, N.J. | 1,020 |
| 269. | Corning Glass Works | Corning, N.Y. | 1,017 |
| 270. | General Public Utilities | Parsippany, N.J. | 1,014 |
| 271. | American Standard | New York | 1,008 |
| 272. | Kimberly-Clark | Dallas | 995 |
| 273. | Schlumberger | New York | 993 |
| 274. | Montgomery Ward | Chicago | 987 |
| 275. | Union Pacific | New York | 973 |
| 276. | Nada Retirement | McLean, Va. | 971 |
| 277. | Ralston Purina | St. Louis | 963 |
| 278. | Eaton | Cleveland | 960 |
| 279. | CIBA-GEIGY | Ardsley, N.Y. | 954 |
| 280. | Fluor | Irvine, Calif. | 952 |
| 281. | Ministers-Missionaries | New York | 945 |
| 282. | Carteret Publishing | Morehead City, N.C. | 940 |
| 283. | Cummins Engine | Columbus, Ind. | 937 |
| 284. | Olin | Stamford, Conn. | 935 |
| 285. | W.R. Grace | New York | 933 |
| 286. | Detroit Edison | Detroit | 925 |
| 287. | Triangle Industries | New York | 917 |
| 288. | Deseret Mutual Benefit | Salt Lake City | 911 |
| 289. | ICMA Retirement | Washington | 903 |
| 290. | Boise Cascade | Boise, Idaho | 901 |
| 291. | Ethyl | Richmond, Va. | 900 |
| 292. | Operating Engineers | Pasadena, Calif. | 900 |
| 293. | Manville | Denver | 896 |
| 294. | Insurance-Supp. Org. | New York | 894 |
| 295. | Middle South Utilities | New Orleans | 894 |
| 296. | Norfolk Southern | Roanoke, Va. | 891 |
| 297. | Mass. Institute of Tech. | Cambridge | 888 |
| 298. | Consumers Power | Jackson, Mich. | 882 |
| 299. | Arizona Public Safety | Phoenix | 874 |
| 300. | Northern States Power | Minneapolis | 873 |
| 301. | Westvaco | New York | 872 |
| 302. | YMCA Retirement | New York | 870 |
| 303. | Chicago Transit | Chicago | 861 |
| 304. | Lutheran Church/Amer. | Minneapolis | 860 |
| 305. | LTV | Dallas | 859 |
| 306. | May Department Stores | St. Louis | 859 |
| 307. | Dana | Toledo, Ohio | 858 |
| 308. | Marsh & McLennan | New York | 857 |
| 309. | General Mills | Minneapolis | 847 |
| 310. | Ashland Oil | Ashland, Ky. | 846 |
| 311. | Consolidated Rail | Philadelphia | 841 |
| 312. | Control Data | Minneapolis | 834 |
| 313. | Hoffman-Laroche | Nutley, N.J. | 830 |
| 314. | Armstrong World | Lancaster, Pa. | 829 |
| 315. | BASF | Parsippany, N.J. | 829 |
| 316. | CSX | Richmond, Va. | 828 |
| 317. | Aramco Services | Houston | 825 |
| 318. | Borg-Warner | Chicago | 825 |
| 319. | Nebraska State | Lincoln | 821 |
| 320. | PepsiCo | Purchase, N.Y. | 819 |
| 321. | Cincinnati Retirement | Cincinnati | 817 |
| 322. | Owens Corning | Toledo, Ohio | 813 |
| 323. | Weyerhaeuser | Tacoma, Wash. | 810 |
| 324. | Laborers' Nat'l Pension | Dallas | 800 |
| 325. | USG | Chicago | 800 |
| 326. | Niagara Mohawk Power | Syracuse, N.Y. | 799 |
| 327. | Colt Industries | New York | 790 |
| 328. | Southland | Dallas | 789 |
| 329. | Norfolk | Norfolk, Va. | 785 |
| 330. | Northeast Utilities | Hartford, Conn. | 783 |
| 331. | Amer. Nat'l Red Cross | Alexandria, Va. | 780 |
| 332. | Minneapolis Employees | Minneapolis | 779 |
| 333. | Orange County | Santa Ana, Calif. | 775 |
| 334. | Centerior Energy | Independence, Ohio | 772 |
| 335. | Reynolds Metals | Richmond, Va. | 769 |
| 336. | R.R. Donnelley | Chicago | 769 |
| 337. | Georgia-Pacific | Atlanta | 766 |
| 338. | Wayne County | Detroit | 765 |
| 339. | Enron | Houston | 761 |
| 340. | Coca-Cola | Atlanta | 758 |
| 341. | Lutheran Church-Mo. | St. Louis | 754 |
| 342. | Singer | Stamford, Conn. | 748 |
| 343. | Consol. Natural Gas | New York | 744 |
| 344. | Air Products | Allentown, Pa. | 742 |
| 345. | San Diego County | San Diego | 740 |
| 346. | IC Industries | Chicago | 739 |
| 347. | Squibb | Princeton, N.J. | 738 |
| 348. | Allied Stores | New York | 737 |
| 349. | Masters, Mates | Linthicum Hgts., Md. | 737 |
| 350. | Federal Retirement | Washington | 736 |
| 351. | Painters International | Washington | 734 |
| 352. | Pillsbury | Minneapolis | 733 |
| 353. | Quaker Oats | Chicago | 732 |
| 354. | Capital Cities/ABC | New York | 725 |
| 355. | Polaroid | Cambridge, Mass. | 725 |
| 356. | Morton Thiokol | Chicago | 721 |
| 357. | Alameda County | Oakland, Calif. | 720 |
| 358. | Kellogg | Battle Creek, Mich. | 719 |
| 359. | Bayer USA | Pittsburgh | 714 |
| 360. | Burlington Industries | Greensboro, N.C. | 713 |
| 361. | Teamsters, Central Pa. | Reading, Pa. | 713 |
| 362. | Liberty Mutual | Boston | 711 |
| 363. | Baxter Travenol | Deerfield, Ill. | 710 |
| 364. | San Diego City | San Diego | 705 |
| 365. | Contel | Atlanta | 700 |
| 366. | N.J. Hospital Assoc. | Princeton, N.J. | 700 |
| 367. | San Jose City | San Jose, Calif. | 700 |
| 368. | Dominion Resources | Richmond, Va. | 697 |
| 369. | Borden | New York | 694 |
| 370. | MBTA | Boston | 690 |
| 371. | A.J. Bayless Markets | Phoenix | 688 |
| 372. | Nat'l Automatic Sprinkler | Landover, Md. | 688 |
| 373. | Central and South West | Dallas | 684 |
| 374. | Virginia Power | Richmond, Va. | 684 |
| 375. | Amax | Greenwich, Conn. | 682 |
| 376. | Anheuser-Busch | St. Louis | 680 |
| 377. | Campbell Soup | Camden, N.J. | 679 |
| 378. | Ingersoll-Rand | Woodcliff Lake, N.J. | 677 |
| 379. | General Signal | Stamford, Conn. | 667 |
| 380. | Milwaukee County | Milwaukee | 666 |
| 381. | S. Bernardino County | San Bernardino, Cal. | 660 |
| 382. | Farmland Industries | Kansas City, Mo. | 658 |
| 383. | Dallas City Employees | Dallas | 657 |
| 384. | U.S. Air | Washington | 657 |
| 385. | Pennsylvania Power | Allentown, Pa. | 655 |
| 386. | Sacramento County | Sacramento, Calif. | 655 |
| 387. | Winn-Dixie Stores | Jacksonville, Fla. | 653 |
| 388. | Beatrice | Chicago | 650 |
| 389. | Blue Cross/Blue Shield | Chicago | 650 |
| 390. | Baltimore G&E | Baltimore | 649 |
| 391. | Mars | McLean, Va. | 642 |
| 392. | Motion Picture Industry | Studio City, Calif. | 641 |
| 393. | Parsons | Pasadena, Calif. | 640 |
| 394. | Kaiser Aluminum | Oakland, Calif. | 636 |
| 395. | Central Pa. Teamsters | Wyomissing, Pa. | 635 |
| 396. | Contra Costa County | Martinez, Calif. | 635 |
| 397. | Peoples Energy | Chicago | 631 |
| 398. | Dayton Hudson | Minneapolis | 630 |
| 399. | Gillette | Boston | 630 |
| 400. | Time | New York | 630 |
| 401. | White Consolidated | Cleveland | 630 |
| 402. | Op. Eng., 3 | San Francisco | 628 |
| 403. | Teamsters Local 710 | Chicago | 626 |
| 404. | Denver Public School | Denver | 620 |
| 405. | Hanson Industries | Iselin, N.J. | 618 |
| 406. | Baltimore County | Towson, Md. | 617 |
| 407. | Primark | Detroit | 614 |
| 408. | Principal Mutual | Des Moines, Iowa | 613 |
| 409. | Harris | Melbourne, Fla. | 607 |
| 410. | Food Comm., Nat'l | Washington | 604 |
| 411. | Budd | Troy, Mich. | 601 |
| 412. | Household International | Prospect Heights, Ill. | 601 |
| 413. | Emhart | Hartford, Conn. | 600 |
| 414. | Longshoremen | New York | 599 |
| 415. | City Investing | New York | 596 |
| 416. | Washington Post | Washington | 592 |
| 417. | Graphic Commun. | Washington | 590 |
| 418. | Security National | Sioux City, Iowa | 590 |
| 419. | Fairfax County | Fairfax, Va. | 587 |
| 420. | Teamsters Local 705 | Chicago | 587 |
| 421. | Marriott | Bethesda, Md. | 586 |
| 422. | ICI Americas | Wilmington, Del. | 581 |
| 423. | Ohio Edison | Akron, Ohio | 580 |
| 424. | Schering-Plough | Madison, N.J. | 580 |
| 425. | Cincinnati Bell | Cincinnati | 579 |
| 426. | Brunswick | Skokie, Ill. | 578 |
| 427. | Memphis City | Memphis | 578 |
| 428. | Kroger | Cincinnati | 577 |
| 429. | Goldman Sachs | New York | 576 |
| 430. | Op. Eng., Ohio | Columbus | 576 |
| 431. | Sara Lee | Chicago | 576 |
| 432. | Arthur Andersen | Chicago | 575 |
| 433. | Elec. Wrkrs., Nat'l HQ | Washington | 573 |
| 434. | Carpenters District | New York | 570 |
| 435. | Gannett | Arlington, Va. | 570 |
| 436. | Christian Church | Indianapolis | 568 |
| 437. | Svc. Empl., 32B/32J | New York | 567 |
| 438. | AMP | Harrisburg, Pa. | 565 |
| 439. | Varian Associates | Palo Alto, Calif. | 564 |
| 440. | McGraw-Hill | New York | 560 |
| 441. | Op. Eng., 150 | Countryside, Ill. | 560 |
| 442. | Emerson Electric | St. Louis | 557 |
| 443. | UFCW Unions | Atlanta | 557 |
| 444. | Laborers' & Retirement | Chicago | 554 |
| 445. | Phelps Dodge | New York | 554 |
| 446. | Battelle Memorial | Columbus, Ohio | 551 |
| 447. | Sundstrand | Rockford, Ill. | 551 |
| 448. | Coastal | Houston | 550 |
| 449. | Timken | Canton, Ohio | 550 |
| 450. | Food/Comm., 27 | Baltimore | 548 |
| 451. | Lumber Production | Portland, Ore. | 548 |
| 452. | Mead | Dayton, Ohio | 548 |
| 453. | De Luxe Check Printers | St. Paul, Minn. | 547 |
| 454. | Teamsters, Philadelphia | Philadelphia | 545 |
| 455. | Houston Industries | Houston | 544 |
| 456. | Iron Workers, Calif. | San Marino, Calif. | 544 |
| 457. | Typographical Union | Colo. Springs, Colo. | 543 |
| 458. | Vermont State | Montpelier | 543 |
| 459. | Louisiana School | Baton Rouge, La. | 538 |
| 460. | Aerospace | El Segundo, Calif. | 537 |
| 461. | Montgomery County | Rockville, Md. | 536 |
| 462. | Tektronix | Beaverton, Ore. | 536 |
| 463. | Amer. Fed./Musicians | New York | 531 |
| 464. | Boston City | Boston | 531 |
| 465. | H.J. Heinz | Pittsburgh | 530 |
| 466. | Electrical Products Ind. | Flushing, N.Y. | 529 |
| 467. | Wisconsin Electric | Milwaukee | 528 |
| 468. | NL Industries | New York | 526 |
| 469. | Colorado Fire & Police | Englewood, Colo. | 525 |
| 470. | Container Corp. | Chicago | 521 |
| 471. | New England Electric | Westborough, Mass. | 520 |
| 472. | Navy Resale System | Staten Island, N.Y. | 518 |
| 473. | CPC International | Englewd. Cl., N.J. | 514 |

# Ranking of funds/sponsors 201-1,000

| Rank | Fund/sponsor | Location | Assets |
|---|---|---|---|
| 474. | Mo. Local Government | Jefferson City | 514 |
| 475. | Laborers' Welfare | Chicago | 510 |
| 476. | Longshoremen, ILWU | San Francisco | 510 |
| 477. | New York State Electric | Ithaca, N.Y. | 510 |
| 478. | San Diego G&E | San Diego | 510 |
| 479. | Graphic Arts Local 458 | Chicago | 507 |
| 480. | Milliken | Spartanburg, S.C. | 502 |
| 481. | Norton | Worcester, Mass. | 502 |
| 482. | Wickes | Santa Monica, Calif. | 502 |
| 483. | City of Jacksonville | Jacksonville, Fla. | 501 |
| 484. | Allegheny Power | New York | 500 |
| 485. | B.F. Goodrich | Akron, Ohio | 500 |
| 486. | Denver Firemen | Denver | 500 |
| 487. | Laborers Pension Fund | Chicago | 500 |
| 488. | Mitre | Bedford, Mass. | 500 |
| 489. | Union Camp | Wayne, N.J. | 500 |
| 490. | Uniroyal Goodrich | Akron, Ohio | 500 |
| 491. | Combustion Engineering | Stamford, Conn. | 498 |
| 492. | Florida Progress | St. Petersburg, Fla. | 498 |
| 493. | Screen Actors Guild | Burbank, Calif. | 493 |
| 494. | Wheeling-Pitt | Wheeling, W. Va. | 493 |
| 495. | Johnson Controls | Milwaukee | 492 |
| 496. | Sandoz | New York | 490 |
| 497. | Baker Hughes | Houston | 488 |
| 498. | Carolina P&L | Raleigh, N.C. | 488 |
| 499. | Communication Wrkrs. | Colo. Springs, Colo. | 486 |
| 500. | F.W. Woolworth | New York | 485 |
| 501. | Minnesota Nurses | St. Paul, Minn. | 482 |
| 502. | Union Electric | St. Louis | 482 |
| 503. | Avon Products | New York | 481 |
| 504. | Inter-Local Pension | Chicago | 478 |
| 505. | Premark Int'l | Deerfield, Ill. | 478 |
| 506. | Stone & Webster | New York | 473 |
| 507. | Uniroyal | Middlebury, Conn. | 473 |
| 508. | Cincinnati Gas | Cincinnati | 472 |
| 509. | Seattle Employees | Seattle | 470 |
| 510. | Printing Pressmen | Los Angeles | 469 |
| 511. | Steelcase | Grand Rapids, Mich. | 465 |
| 512. | Firestone Tire | Akron, Ohio | 463 |
| 513. | Teamster Affiliates | Washington | 462 |
| 514. | Walgreen | Deerfield, Ill. | 462 |
| 515. | State Farm Insurance | Bloomington, Ill. | 460 |
| 516. | Joseph E. Seagram | New York | 458 |
| 517. | National Distillers | New York | 458 |
| 518. | Inter-American Develop. | Washington | 454 |
| 519. | Maytag | Newton, Iowa | 454 |
| 520. | Primerica | Greenwich, Conn. | 454 |
| 521. | Lever Brothers | New York | 453 |
| 522. | McKesson | San Francisco | 453 |
| 523. | Wal-Mart Stores | Bentonville, Ark. | 453 |
| 524. | Koppers | Pittsburgh | 451 |
| 525. | Laborers, Construction | Forest Park, Ill. | 451 |
| 526. | Alaska Teamsters, 959 | Anchorage, Alaska | 450 |
| 527. | Dresser | Dallas | 450 |
| 528. | Laborers Int'l HQ | Washington | 450 |
| 529. | Laborers, S. Calif. | Los Angeles | 449 |
| 530. | Op. Engineers, 324 | Birmingham, Mich. | 449 |
| 531. | Hoechst-Celanese | New York | 448 |
| 532. | Paper Industry | Nashville | 447 |
| 533. | Cargill | Minneapolis | 445 |
| 534. | Sherwin-Williams | Cleveland | 445 |
| 535. | Carter Hawley Hale | Los Angeles | 444 |
| 536. | Briggs & Stratton | Milwaukee | 443 |
| 537. | MEBA, District 2 | Brooklyn | 441 |
| 538. | Chicago Carpenters | Chicago | 440 |
| 539. | R.H. Macy | New York | 437 |
| 540. | Northern Ill. Gas | Aurora, Ill. | 435 |
| 541. | A.O. Smith | Milwaukee | 434 |
| 542. | Food/Comm. Butchers | Oakland, Calif. | 434 |
| 543. | Carpenter Technology | Reading, Pa. | 433 |
| 544. | Hospital Corp. | Nashville | 433 |
| 545. | Carpenters, Council | Chicago | 432 |
| 546. | Arizona Public Service | Phoenix | 431 |
| 547. | Peat Marwick Main | New York | 430 |
| 548. | Texas Eastern | Houston | 430 |
| 549. | Panhandle Eastern | Houston | 429 |
| 550. | Dallas Police & Fire | Dallas | 428 |
| 551. | Tribune | Chicago | 428 |
| 552. | Fresno County | Fresno, Calif. | 427 |
| 553. | Perkin-Elmer | Norwalk, Conn. | 427 |
| 554. | Atlantic City Electric | Pleasantville, N.J. | 426 |
| 555. | Teamsters, N.Y. State | Utica, N.Y. | 426 |
| 556. | Lear Siegler | Santa Monica, Calif. | 425 |
| 557. | Mercantile Stores | New York | 425 |
| 558. | Roadway Services | Akron, Ohio | 422 |
| 559. | Hammermill Paper | Erie, Pa. | 421 |
| 560. | Teamsters, West. Pa. | Pittsburgh | 420 |
| 561. | UNC | Annapolis, Md. | 420 |
| 562. | S. Calif. Rapid | Los Angeles | 419 |
| 563. | Fort Worth Employees | Fort Worth, Texas | 411 |
| 564. | Johnson & Higgins | New York | 409 |
| 565. | Endata | Nashville | 407 |
| 566. | Becton, Dickinson | Franklin Lakes, N.J. | 406 |
| 567. | Amer. Home Products | New York | 405 |
| 568. | Asarco | New York | 404 |
| 569. | AFTRA | New York | 400 |
| 570. | Arthur D. Little | Cambridge, Mass. | 400 |
| 571. | Denver Employees | Denver | 400 |
| 572. | Henley Group | La Jolla, Calif. | 400 |
| 573. | J.P. Stevens | New York | 400 |
| 574. | Minneapolis Teachers | Minneapolis | 400 |
| 575. | J.M. Huber | Edison, N.J. | 399 |
| 576. | Rohr Industries | Chula Vista, Calif. | 399 |
| 577. | Piedmont Aviation | Winston-Salem, N.C. | 398 |
| 578. | Boston Edison | Boston | 396 |
| 579. | Springs Industries | Fort Mill, S.C. | 396 |
| 580. | Williams Cos. | Tulsa, Okla. | 396 |
| 581. | Atlanta General Empl. | Atlanta | 393 |
| 582. | Cincinnati Milacron | Cincinnati | 393 |
| 583. | Amalg. Cotton Garment | New York | 385 |
| 584. | Carpenters, Detroit | Detroit | 385 |
| 585. | Reliance Electric | Cleveland | 385 |
| 586. | Food/Comm. Wrks. | Los Angeles | 384 |
| 587. | Kern County | Bakersfield, Calif. | 384 |
| 588. | Elec. Workers, S. Calif. | Los Angeles | 383 |
| 589. | Bell Communications | Livingston, N.J. | 382 |
| 590. | Centel | Chicago | 382 |
| 591. | Lowe's Cos. | N. Wilkesboro, N.C. | 382 |
| 592. | Directors Guild of Amer. | Los Angeles | 379 |
| 593. | Food/Comm., 174 | New York | 379 |
| 594. | Carpenters, Cleveland | Clevland | 378 |
| 595. | Seafarers | Camp Springs, Md. | 378 |
| 596. | Hwy./Transportation | Jefferson City, Mo. | 377 |
| 597. | Reader's Digest | Pleasantville, N.Y. | 377 |
| 598. | Sheet Metal Wrks., 10 | Los Angeles | 376 |
| 599. | American Motors | Southfield, Mich. | 375 |
| 600. | Ventura County | Ventura, Calif. | 375 |
| 601. | Clark Equipment | Buchanan, Mich. | 373 |
| 602. | Transco Energy | Houston | 373 |
| 603. | Elec. Workers, 154 | Anchorage, Alaska | 372 |
| 604. | Long Island Light. | Hicksville, N.Y. | 370 |
| 605. | Anchor Hocking | Lancaster, Ohio | 369 |
| 606. | Memphis Light | Memphis | 369 |
| 607. | Amstar | New York | 367 |
| 608. | First Asset | Minneapolis | 367 |
| 609. | McKinsey | New York | 367 |
| 610. | Gulf & Western | New York | 366 |
| 611. | Hartford City | Hartford, Conn. | 366 |
| 612. | Plumbers, 16 | Los Angeles | 366 |
| 613. | Public Service Colo. | Denver | 366 |
| 614. | Pitney Bowes | Stamford, Conn. | 365 |
| 615. | Brooklyn Union Gas | Brooklyn | 363 |
| 616. | Ernst & Whinney | Cleveland | 363 |
| 617. | Alexander & Alexander | Baltimore | 361 |
| 618. | Automotive Ind. | Oakland, Calif. | 361 |
| 619. | Enserch | Dallas | 360 |
| 620. | Hershey Food | Hershey, Pa. | 360 |
| 621. | UFCW, Midwest | Chicago | 360 |
| 622. | Bldg. Trades United | Milwaukee | 358 |
| 623. | Belk/Leggett | Charlotte, N.C. | 357 |
| 624. | Plumbers, 597 | Chicago | 357 |
| 625. | Food/Comm., 876 | Madison Hgts., Mich. | 356 |
| 626. | Int'l Minerals | Mundelein, Ill. | 355 |
| 627. | Champion Spark Plug | Toledo, Ohio | 353 |
| 628. | Flint City | Flint, Mich. | 352 |
| 629. | Rochester Gas | Rochester, N.Y. | 352 |
| 630. | Nat'l Telephone Co-op | Washington | 350 |
| 631. | Andersen | Bayport, Minn. | 349 |
| 632. | Boy Scouts of Amer. | Irving, Texas | 349 |
| 633. | Pennwalt | Philadelphia | 349 |
| 634. | Longshoremen | Baltimore | 348 |
| 635. | Nat'l Maritime Union | New York | 346 |
| 636. | Federal Express | Memphis | 345 |
| 637. | Loews | New York | 345 |
| 638. | S.C. Johnson | Racine, Wis. | 344 |
| 639. | Bank of New York | New York | 343 |
| 640. | Major League Players | New York | 343 |
| 641. | Nalco Chemical | Naperville, Ill. | 343 |
| 642. | Revlon | New York | 342 |
| 643. | Delmarva Power | Wilmington, Del. | 341 |
| 644. | Square D | Palatine, Ill. | 341 |
| 645. | Nat'l Industrial | Newark, N.J. | 339 |
| 646. | Gates Rubber | Denver | 338 |
| 647. | Potlatch | San Francisco | 338 |
| 648. | Rapid-American | New York | 337 |
| 649. | Chicago Firemen | Chicago | 336 |
| 650. | Vulcan Materials | Birmingham, Ala. | 336 |
| 651. | Hotel & Restaurant, 165 | Las Vegas | 335 |
| 652. | Western Metal Ind. | Seattle | 335 |
| 653. | Sonat | Birmingham, Ala. | 334 |
| 654. | Baton Rouge City | Baton Rouge, La. | 333 |
| 655. | Potomac Electric | Washington | 333 |
| 656. | Agway | Syracuse, N.Y. | 332 |
| 657. | San Mateo County | Redwood City, Calif. | 332 |
| 658. | Gerber Products | Fremont, Mich. | 330 |
| 659. | Bricklayers/Trowel | Washington | 328 |
| 660. | Commerce Clearing | Chicago | 328 |
| 661. | Amerada Hess | New York | 327 |
| 662. | Trinova | Toledo, Ohio | 327 |
| 663. | Philadelphia Carpenters | Philadelphia | 326 |
| 664. | Auto Workers, 65 | New York | 325 |
| 665. | Flying Tiger | Los Angeles | 325 |
| 666. | Great Northern Nekoosa | Stamford, Conn. | 325 |
| 667. | Washington Gas Light | Washington | 324 |
| 668. | Laborers, Ohio | Columbus | 322 |
| 669. | Alco Standard | Wayne, Pa. | 321 |
| 670. | N. Dakota Teachers | Bismarck | 321 |
| 671. | Northern Telecom | Nashville | 321 |
| 672. | Burroughs Wellcome | Research Tri., N.C. | 320 |
| 673. | San Joaquin County | Stockton, Calif. | 320 |
| 674. | Sterling Drug | New York | 320 |
| 675. | Laborers, 341/942/133 | Seattle | 319 |
| 676. | Maritime Association | Houston | 317 |
| 677. | Equifax | Atlanta | 316 |
| 678. | V F Corp. | Reading, Pa. | 316 |
| 679. | Carnation | Los Angeles | 315 |
| 680. | Gulf States Utilities | Beaumont, Texas | 314 |
| 681. | Armtek | New Haven, Conn. | 313 |
| 682. | Elec. Contractors, 134 | Chicago | 313 |
| 683. | Hearst | New York | 313 |
| 684. | N. Calif. Sheetmetal | San Francisco | 313 |
| 685. | Tampa Fire/Police | Tampa, Fla. | 311 |
| 686. | Boc Group | Montvale, N.J. | 310 |
| 687. | St. Louis Public School | St. Louis | 310 |
| 688. | Firemen's Fund | Novato, Calif. | 309 |
| 689. | Miami Employees | Miami | 309 |
| 690. | Sacramento City | Sacramento, Calif. | 308 |
| 691. | Western Union | Up. Sad. River, N.J. | 308 |
| 692. | EG&G | Wellesley, Mass. | 307 |
| 693. | Mass. Carpenters | Burlington, Mass. | 307 |
| 694. | Chesebrough-Pond's | Greenwich, Conn. | 305 |
| 695. | Austin City | Austin, Texas | 304 |
| 696. | Arlington County | Arlington, Va. | 302 |
| 697. | Knight-Ridder | Miami | 302 |
| 698. | Nestle | Purchase, N.Y. | 302 |
| 699. | Capital Holding | Louisville, Ky. | 301 |
| 700. | Blue Cross/Blue Shield | Des Moines, Iowa | 300 |
| 701. | Jim Walter | Tampa, Fla. | 300 |
| 702. | Marion Labs | Kansas City, Mo. | 300 |
| 703. | McDonald's | Oak Brook, Ill. | 300 |
| 704. | Nat'l Football League | New York | 300 |
| 705. | Phoenix Employees | Phoenix | 300 |
| 706. | Stanley Works | New Britain, Conn. | 300 |
| 707. | Dan River | Danville, Va. | 299 |
| 708. | N.Y. Cultural | New York | 299 |
| 709. | Oklahoma G&E | Oklahoma City | 299 |
| 710. | Consolidated Papers | Wis. Rapids, Wis. | 297 |
| 711. | Brockway (NY) | Jacksonville, Fla. | 296 |
| 712. | Sanitary District | Chicago | 296 |
| 713. | Cleveland-Cliffs | Cleveland, Ohio | 294 |
| 714. | Norfolk City Employees | Norfolk, Va. | 292 |
| 715. | Royal Insurance | Charlotte, N.C. | 292 |
| 716. | Amer. Nat'l Can | Chicago | 291 |
| 717. | Laborers, Mason | New York | 290 |
| 718. | North Dakota Public | Bismarck, N.D. | 290 |
| 719. | Outboard Marine | Waukegan, Ill. | 290 |
| 720. | Op. Eng., 15 | New York | 289 |
| 721. | Zenith Electronics | Chicago | 289 |
| 722. | CBI Industries | Oak Brook, Ill. | 288 |
| 723. | Fresno City | Fresno, Calif. | 288 |
| 724. | Publix Super Markets | Lakeland, Fla. | 288 |
| 725. | Missouri Highway | Jefferson City, Mo. | 287 |
| 726. | Cyclops | Pittsburgh | 286 |
| 727. | Food & Comm., 455 | Houston | 285 |
| 728. | Fort Howard | Green Bay, Wis. | 285 |
| 729. | Amsted Industries | Chicago | 283 |
| 730. | Cozen & O'Conner | Philadelphia | 283 |
| 731. | Carpenters, W. Wash. | Seattle | 282 |
| 732. | N. Ind. Public Service | Hammond, Ind. | 282 |
| 733. | Bldg. Service Pension | San Francisco | 281 |
| 734. | Mass. Laborers | Newton, Mass. | 280 |
| 735. | Interco | St. Louis | 279 |
| 736. | Iron Workers | Charleston, W. Va. | 279 |
| 737. | Op. Eng., 82 | Newark, N.J. | 279 |
| 738. | Paine Webber | New York | 278 |
| 739. | Plasterers/Cement | El Monte, Calif. | 277 |
| 740. | Litho./Photoengrave | Washington | 276 |
| 741. | Children's Med. Center | Boston | 275 |
| 742. | Lone Star | Dallas | 275 |
| 743. | Machinists, Nat'l HQ | Washington | 275 |
| 744. | AMCA Int'l | Hanover, N.H. | 274 |
| 745. | First Boston | New York | 274 |
| 746. | Charter | Jacksonville, Fla. | 273 |

# Ranking of funds/sponsors 201-1,000

| Rank | Fund/sponsor | Location | Assets |
|---|---|---|---|
| 747. | Producer-Writers | Burbank, Calif. | 273 |
| 748. | Rochester Telephone | Rochester, N.Y. | 273 |
| 749. | Auto Workers, Nat'l HQ | Detroit | 272 |
| 750. | Plumbers Local 525 | Las Vegas | 272 |
| 751. | Levi Strauss | San Francisco | 270 |
| 752. | Graybar Electric | St. Louis | 269 |
| 753. | TPF&C | Philadelphia | 269 |
| 754. | Elf Aquitaine | Stamford, Conn. | 268 |
| 755. | Hawaiian Electric | Honolulu | 268 |
| 756. | Rexnord | Brookfield, Wis. | 268 |
| 757. | Salt River Project | Phoenix | 268 |
| 758. | Federal-Mogul | Detroit | 267 |
| 759. | Blue Cross/Blue Shield | Southfield, Mich. | 266 |
| 760. | Conagra | Omaha, Neb. | 266 |
| 761. | Joy Manufacturing | Pittsburgh | 265 |
| 762. | Santa Barbara County | Santa Barbara, Calif. | 265 |
| 763. | Steelworkers, Nat'l HQ | Pittsburgh | 265 |
| 764. | Arthur Young U.S. | New York | 264 |
| 765. | Pacific P&L | Portland, Ore. | 264 |
| 766. | Salomon Brothers | New York | 263 |
| 767. | Greater Cleve. Hosp. | Cleveland | 261 |
| 768. | Upholsterers, Int'l HQ | Philadelphia | 260 |
| 769. | Carpenters, Int'l HQ | Washington | 259 |
| 770. | St. Paul Teachers | St. Paul, Minn. | 259 |
| 771. | Kansas P&L | Topeka, Kan. | 258 |
| 772. | Allis-Chalmers | Milwaukee | 256 |
| 773. | Gould | Rolling Meadows, Ill. | 256 |
| 774. | Pechiney | Greenwich, Conn. | 256 |
| 775. | Sybron | Saddle Brook, N.J. | 256 |
| 776. | Texas Gas Trans. | Greensboro, Ky. | 256 |
| 777. | Chicago Park Empl. | Chicago | 255 |
| 778. | City of Kansas | Kansas City | 254 |
| 779. | Carpenters, Ill. | Geneva, Ill. | 253 |
| 780. | Daniel Int'l | Greenville, S.C. | 253 |
| 781. | Hotel & Restaurant | Chicago | 253 |
| 782. | Southwestern Public | Amarillo, Texas | 253 |
| 783. | Allegheny Int'l | Pittsburgh | 252 |
| 784. | Masonite | Chicago | 252 |
| 785. | Laborers, 341 | Anchorage, Alaska | 251 |
| 786. | Pickands Mather | Cleveland | 251 |
| 787. | Arvin Industries | Columbus, Ind. | 250 |
| 788. | Harcourt Brace | Orlando, Fla. | 250 |
| 789. | Ohio Casualty | Hamilton, Ohio | 250 |
| 790. | Equity-League Pension | New York | 249 |
| 791. | Farley Industries | Chicago | 249 |
| 792. | Central Beef | N'dham Hts., Mass. | 248 |
| 793. | Hersey Products | Cleveland | 248 |
| 794. | American Water | Haddon Hgts., N.J. | 247 |
| 795. | GATX | Chicago | 247 |
| 796. | Laborers, Western Pa. | Pittsburgh | 246 |
| 797. | Peabody Holding | St. Louis, Mo. | 246 |
| 798. | Wichita City | Wichita, Kan. | 246 |
| 799. | Iron Wrkrs., No. N.J. | Newark, N.J. | 245 |
| 800. | Iron Workers, S. Ohio | Dayton | 245 |
| 801. | Amfac | San Francisco | 244 |
| 802. | Parker-Hannifin | Cleveland | 244 |
| 803. | Wis. Public Service | Green Bay | 244 |
| 804. | Combined Insurance | Chicago | 243 |
| 805. | Illinois Power | Decatur, Ill. | 243 |
| 806. | Fairchild Industries | Chantilly, Va. | 242 |
| 807. | Aon | Chicago | 241 |
| 808. | American Insurance | New York | 240 |
| 809. | Marmon Group | Chicago | 240 |
| 810. | New York Times | New York | 240 |
| 811. | Penn Central | Greenwich, Conn. | 240 |
| 812. | Portland Gen'l Electric | Portland, Ore. | 240 |
| 813. | Tecumseh Products | Tecumseh, Mich. | 240 |
| 814. | Babcock Industries | Fairfield, Conn. | 239 |
| 815. | Electronic Data Systems | Dallas | 239 |
| 816. | Puget Sound Power | Bellevue, Wash. | 238 |
| 817. | Great Lakes Carbon | Briarcliff Manor, N.Y. | 237 |
| 818. | Arkla | Shreveport, La. | 236 |
| 819. | Kerr-McGee | Oklahoma City | 236 |
| 820. | Food/Comm., 1001 | Bellevue, Wash. | 235 |
| 821. | Iron Wrkrs., 40/361/417 | New York | 235 |
| 822. | ONEOK | Tulsa | 235 |
| 823. | Texas Iron Workers | Houston | 235 |
| 824. | United Svcs. Auto | San Antonio, Texas | 234 |
| 825. | Oakland County | Pontiac, Mich. | 233 |
| 826. | NVF | Miami Beach | 231 |
| 827. | Arkansas State Highway | Little Rock | 230 |
| 828. | South Carolina Electric | Columbia, S.C. | 229 |
| 829. | St. Louis Employees | St. Louis | 227 |
| 830. | S. Calif. Permanente | Pasadena, Calif. | 227 |
| 831. | Utah Power & Light | Salt Lake City | 227 |
| 832. | Marin County | San Rafael, Calif. | 226 |
| 833. | Teco Energy | Tampa, Fla. | 226 |
| 834. | Continental Grain | New York | 225 |
| 835. | Pittston | Greenwich, Conn. | 225 |
| 836. | San Antonio Firemen | San Antonio, Texas | 225 |
| 837. | Iron Workers, 25 | Novi, Mich. | 224 |
| 838. | William Wrigley | Chicago | 224 |
| 839. | Machinists, Automotive | Seattle | 223 |
| 840. | Witco | New York | 223 |
| 841. | Food/Comm., 7 | Wheat Ridge, Colo. | 222 |
| 842. | Heavy & Gen'l Laborers | Newark, N.J. | 222 |
| 843. | Machinists, Dist. 9 | Bridgeton, Mo. | 222 |
| 844. | Simpson Investment | Seattle | 222 |
| 845. | St. Louis Police | St. Louis | 221 |
| 846. | Dynacast | Yorktown Hgts., N.Y. | 220 |
| 847. | Iron Workers/Texas | Houston | 220 |
| 848. | Michigan State Univ. | East Lansing | 219 |
| 849. | Org. Amer. States | Washington | 219 |
| 850. | Tandy/Radio Shack | Fort Worth, Texas | 219 |
| 851. | Food/Comm., 576 | Kansas City, Mo. | 218 |
| 852. | Teamsters, 282 | Elmont, N.Y. | 218 |
| 853. | Dow Jones | Princeton, N.J. | 217 |
| 854. | Heublein | Farmington, Conn. | 217 |
| 855. | Oakland Municipal | Oakland, Calif. | 216 |
| 856. | Shelby County | Memphis | 216 |
| 857. | Indianapolis Power | Indianapolis | 215 |
| 858. | Laborers, 472/172 | Newark, N.J. | 215 |
| 859. | Plumbers, 444/159/342 | San Francisco | 215 |
| 860. | Sealed Power | Muskegon, Mich. | 215 |
| 861. | Adolph Coors | Golden, Colo. | 214 |
| 862. | Kansas City P&L | Kansas City, Mo. | 212 |
| 863. | Nat'l Starch & Chem. | Bridgewater, N.J. | 212 |
| 864. | Vassar College | Poughkeepsie, N.Y. | 212 |
| 865. | MAPCO | Tulsa | 211 |
| 866. | Foxboro | Foxboro, Mass. | 210 |
| 867. | Signode | Glenview, Ill. | 210 |
| 868. | Syntex | Palo Alto, Calif. | 210 |
| 869. | BBDO Int'l | New York | 209 |
| 870. | Knoxville Employees | Knoxville, Tenn. | 209 |
| 871. | A.G. Edwards | St. Louis, | 208 |
| 872. | Bowater | Darien, Conn. | 208 |
| 873. | Elec. Workers, 332 | San Jose, Calif. | 208 |
| 874. | Humana | Louisville, Ky. | 208 |
| 875. | Ill. Tool Works | Chicago | 208 |
| 876. | Interlake | Oak Brook, Ill. | 207 |
| 877. | Omaha Public Power | Omaha, Neb. | 207 |
| 878. | SKF Industries | King of Prussia, Pa. | 207 |
| 879. | Duquesne Light | Pittsburgh | 206 |
| 880. | U.S. Borax/Chemical | Los Angeles | 206 |
| 881. | Birmingham City | Birmingham, Ala. | 205 |
| 882. | Grand Rapids City | Grand Rapids, Mich. | 205 |
| 883. | Pennsylvania Municipal | Harrisburg, Pa. | 203 |
| 884. | Siemens Capital | New York | 203 |
| 885. | Thomas J. Lipton | Englewood Clf., N.J. | 203 |
| 886. | Carpenters, W. Pa. | Pittsburgh | 202 |
| 887. | Dekalb Employees | Decatur, Ga. | 202 |
| 888. | K.C. Public Schools | Kansas City, Mo. | 202 |
| 889. | Morrison Knudsen | Boise, Idaho | 201 |
| 890. | Cox Enterprises | Atlanta | 200 |
| 891. | Harsco | Camp Hill, Pa. | 200 |
| 892. | Nashville/Davidson Co. | Nashville, Tenn. | 200 |
| 893. | National Fuel Gas | Buffalo, N.Y. | 200 |
| 894. | Plumbers, 638/Steam. | Long Island, N.Y. | 200 |
| 895. | Sisters of Mercy | Farm'ton Hills, Mich. | 200 |
| 896. | Alcan Aluminum | Cleveland | 199 |
| 897. | Black & Decker (U.S.) | Towson, Md. | 199 |
| 898. | Torchmark | Birmingham, Ala. | 199 |
| 899. | Laborers Local 731 | New York | 198 |
| 900. | Smith Int'l | Newport Beach, Cal. | 198 |
| 901. | Textile Workers Nat'l | New York | 198 |
| 902. | Banco Popular | Hat Rey, P.R. | 197 |
| 903. | Iron Workers Locals | Seattle | 197 |
| 904. | Newmont Mining | New York | 197 |
| 905. | Dennison Mfg. | Waltham, Mass. | 195 |
| 906. | Figgie Int'l | Richmond, Va. | 195 |
| 907. | Indiana Farmers Mutual | Indianapolis | 195 |
| 908. | Moorman Mfg. | Quincy, Ill. | 195 |
| 909. | Brown-Forman | Louisville, Ky. | 194 |
| 910. | Amica Mutual | Providence, R.I. | 193 |
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| 912. | Yellow Freight System | Overland Park, Kan. | 193 |
| 913. | Auto. Club of S. Calif. | Los Angeles | 192 |
| 914. | Diversified Energies | Minneapolis | 192 |
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| 916. | New Orleans Steamship | New Orleans | 191 |
| 917. | TBG | New York | 191 |
| 918. | Castle & Cooke | Los Angeles | 190 |
| 919. | Chubb | Warren Town., N.J. | 189 |
| 920. | Kaiser Northwest | Portland, Ore. | 189 |
| 921. | Commonwealth Energy | Cambridge, Mass. | 188 |
| 922. | Dillon Cos. | Hutchinson, Kan. | 188 |
| 923. | Dravo | Pittsburgh | 188 |
| 924. | Rubbermaid | Wooster, Ohio | 188 |
| 925. | St. Joe Minerals | Clayton, Mo. | 188 |
| 926. | United Brands | New York | 187 |
| 927. | Auto. Club of S. Calif. | Los Angeles | 186 |
| 928. | Calif. State Auto. | San Francisco | 186 |
| 929. | Copley Press | La Jolla, Calif. | 186 |
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| 934. | Wisconsin Gas | Milwaukee | 185 |
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| 936. | Hiram Walker & Sons | Detroit | 184 |
| 937. | Laborers, 253 | Jacksonville, Ill. | 184 |
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| 940. | Thomson McKinnon | New York | 184 |
| 941. | White Castle System | Columbus, Ohio | 184 |
| 942. | Bell & Howell | Skokie, Ill. | 183 |
| 943. | Central Ill. Light | Peoria | 183 |
| 944. | Willamette Industries | Portland, Ore. | 183 |
| 945. | Blue Cross of Mass. | Boston | 182 |
| 946. | Brown Group | St. Louis | 182 |
| 947. | N'western Steel/Wire | Sterling, Ill. | 182 |
| 948. | Tacoma Employees | Tacoma, Wash. | 182 |
| 949. | Fruehauf | Detroit | 181 |
| 950. | Painters District, 2 | San Francisco | 181 |
| 951. | Tulare County | Visalia, Calif. | 181 |
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| 954. | Science Applications | San Diego | 180 |
| 955. | St. Louis Firemen | St. Louis | 180 |
| 956. | Teamsters Mid-Jersey | N. Brunswick, N.J. | 180 |
| 957. | Dayton Power | Dayton, Ohio | 179 |
| 958. | Elec. Workers, 1186 | Honolulu | 178 |
| 959. | Kimball Int'l | Jasper, Ind. | 178 |
| 960. | Carpenters District | Union, N.J. | 177 |
| 961. | Elec. Workers, 3 | East Rutherford, N.J. | 177 |
| 962. | Longview Fibre | Longview, Wash. | 177 |
| 963. | Pacific Maritime | San Francisco | 177 |
| 964. | Data General | Westborough, Mass. | 176 |
| 965. | Mine Safety Appliance | Pittsburgh | 176 |
| 966. | Reserve Mining | Silver Bay, Minn. | 176 |
| 967. | Limited Stores | Columbus, Ohio | 175 |
| 968. | Richmond Supplemental | Richmond, Va. | 175 |
| 969. | Scovill | Waterbury, Conn. | 175 |
| 970. | Stanadyne | Windsor, Conn. | 175 |
| 971. | Deloitte, Haskins | New York | 174 |
| 972. | A.E. Staley | Rolling Meadows, Ill. | 173 |
| 973. | Cluett, Peabody | New York | 171 |
| 974. | Commercial Credit | Baltimore | 170 |
| 975. | Ironworkers District | Philadelphia | 170 |
| 976. | Lincoln Electric | Cleveland | 170 |
| 977. | Archer Daniels Midland | Decatur, Ill. | 169 |
| 978. | Land-O-Lakes | Arden Hills, Minn. | 169 |
| 979. | Lubrizol | Wickliffe, Ohio | 169 |
| 980. | Teamsters North Jersey | Union City, N.J. | 169 |
| 981. | American Greetings | Cleveland | 168 |
| 982. | Barnes Group | Bristol, Conn. | 168 |
| 983. | Jack Eckerd | Largo, Fla. | 168 |
| 984. | Kaneb Services | Houston | 167 |
| 985. | Media General | Richmond, Va. | 167 |
| 986. | Plumbers/Steam., 420 | Philadelphia | 167 |
| 987. | Food/Comm., 464 | Little Falls, N.J. | 166 |
| 988. | Koch Industries | Wichita, Kan. | 166 |
| 989. | Laborers District Council | Lansing, Mich. | 166 |
| 990. | Lucky Stores | Dublin, Calif. | 166 |
| 991. | MCA | Universal City, Calif. | 166 |
| 992. | National Gypsum | Dallas | 66 |
| 993. | PSA | San Diego | 166 |
| 994. | Food/Comm., 555 | Tigard, Ore. | 165 |
| 995. | Mercedes Benz | Montvale, N.J. | 165 |
| 996. | Omaha School Empl. | Omaha | 165 |
| 997. | Hotel Trades Council | New York | 164 |
| 998. | Nat'l Gallery of Art | Washington | 164 |
| 999. | Oper. Eng. Locals | Syracuse, N.Y. | 164 |
| 1000. | Public Service/N.M. | Albuquerque, N.M. | 164 |

On the following pages, *Pensions & Investment Age* presents sketches of the nation's 200 largest pension funds. The profiles include the funds' asset allocation, investment managers and key personnel. All information is ©1988 Crain Communications Inc.

# A

## Abbott Laboratories

| | ($ millions) |
|---|---|
| Total assets | 1,680 |
| Defined benefit | 800 |
| Defined contribution | 880 |
| Employer contributions | 16 |
| Benefit payments | 19 |
| In-house assets | 300 |
| Asset mix: | |
| Stocks | 50% |
| Bonds | 50% |

ABBOTT PARK, Ill. — Abbott Laboratories' total benefit assets increased 44.8% in the year ended Sept. 30 to $1.68 billion from $1.16 billion. Defined benefit assets increased 35.6% to $800 million from $590 million, while defined contribution assets grew 54.4% to $880 million from $570 during the same period.

**Equity managers:** Jennison; RCM; Hagler Mastrovita & Hewitt; Froley Revy.

**Fixed-income managers:** RCM.

The master custodian is Continental Bank.

A.G. Olsen, director-employee financial programs, oversees investment management of the fund.

## Aetna Life & Casualty Co.

| | ($ millions) |
|---|---|
| Total assets | 2,294 |
| Defined benefit | 1,537 |
| 401(k) | 733 |
| IRAs | 24 |
| Employer contributions | 35 |
| Benefit payments | 42 |
| Portfolio insurance | 826 |
| In-house assets: | |
| Equities | 869 |
| Fixed income | 390 |
| Short term | 7 |
| Other | 271 |
| Passive investments: | |
| GICs | 390 |
| Alternative investments: | |
| International equities | 65 |
| Real estate equity | 78 |
| Mortgages | 19 |
| Mortgage-backed securities | 8 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 57% |
| Bonds | 7% |
| Cash equivalents | 0.5% |
| Real estate equity | 5% |
| Mortgages | 1% |
| Mortgage-backed securities | 0.5% |
| GICs | 25% |
| International equity | 4% |

HARTFORD, Conn. — Aetna Life & Casualty Co.'s total employee benefit assets grew 18.5% to $2.294 billion from $1.936 billion during the year ended Sept. 30. As a result of the crash, domestic stocks were reduced from 56.5% of the pension portfolio to 51.3%, and international stocks dropped from 4.2% to 3.8% as of Nov. 1. The GIC portion, meanwhile rose from 25.4% to 29.7%, and bonds, mortgages, mortgage-backed securities and real estate portions grew slightly.

All Aetna Life's retirement and 401(k) assets are managed by Aetna Capital Management.

The master trustee is Connecticut National Bank.

Key personnel overseeing the investment management of the fund are: D.G. Conrad, executive vice president; P.R. Roberts, senior vice president-financial; and E.F. Kelly, vice president-pension.

## Retirement Systems of Alabama

| | ($ millions) |
|---|---|
| Total assets* | 6,233 |
| Defined benefit | 6,233 |
| Employer contributions | 276 |
| Benefit payments | 258 |
| *book value | |
| In-house assets: | |
| Equities | 946 |
| Fixed income | 4,519 |
| Short term | 747 |
| Other | 21 |
| Passive investments: | |
| Indexed stocks | 602 |
| GICs | 13 |
| Alternative investments: | |
| Private placements | 939 |
| Real estate equity | 4 |
| Mortgages | 968 |
| Mortgage-backed securities | 626 |
| Hedging devices: | |
| Stock options | Y |
| Asset mix: | |
| Stocks | 15.2% |
| Bonds | 46.9% |
| Cash equivalents | 12.1% |
| Real estate equity | 0.1% |
| Mortgages | 15.5% |
| Mortgage-backed securities | 10% |
| GICs | 0.2% |

MONTGOMERY, Ala. — Assets of the Retirement Systems of Alabama increased 14.3% for the year ended Sept. 30 to $6.233 billion from $5.454 billion in 1986.

Key personnel overseeing the investment management of the fund are David G. Bronner, chief executive officer; Hunter Reaves, director-fixed income; and Cheryl Duke, director-equities.

## State of Alaska Retirement Systems

| | ($ millions) |
|---|---|
| Total assets* | 3,340 |
| Defined benefit | 3,340 |
| Employer contributions | 150 |
| Benefit payments | 104 |
| *as of June 30, 1987 | |
| In-house assets: | |
| Fixed income | 1,553 |
| Short term | 260 |
| Alternative investments: | |
| International equities | 332 |
| Real estate equity | 196 |
| Mortgages | 265 |
| Hedging devices: | |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 40% |
| Bonds | 38% |
| Cash equivalents | 8% |
| Real estate equity | 6% |
| Mortgages | 8% |

JUNEAU, Alaska — Assets of the State of Alaska Retirement Systems increased 16.9% for the year ended June 30, to $3.34 billion from $2.857 billion. Although fund officials would not provide specific amounts on assets lost in the October stock market drop, a spokesman said the fund's domestic equity managers were holding cash but speculated the fund did only "10% better than the market" on its equity investments. However, the asset mix was unchanged.

**Equity managers** (Domestic): Fred Alger; INVESCO; Lehman Management. (International): Citicorp; Morgan Guaranty Trust.

**Real estate managers:** Aetna; Equitable; JMB; J.P. Morgan; Karsten; and Security Capital.

The master custodian is First Pennsylvania Bank.

Key personnel overseeing the investment management of the fund are James R. Wilson, Kenneth L. Shaffer and Martin Lentz, state investment officers.

## Allegis Corp.

| | ($ millions) |
|---|---|
| Total assets | 3,100 |
| Defined benefit | 1,800 |
| Defined contribution | 1,100 |
| 401(k) | 200 |
| Employer contributions | 86 |
| Benefit payments | 87 |
| Passive investments: | |
| Indexed stocks | 300 |
| Alternative investments: | |
| Real estate equity | 200 |
| Hedging devices: | |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 43% |
| Bonds | 35% |
| Cash equivalents | 11% |
| Real estate equity | 11% |

CHICAGO — Allegis Corp., formerly UAL Inc., had $3.1 billion in total employee benefit assets as of Sept. 30, an increase of 19.2% from $2.6 billion the previous year. Defined benefit assets increased 12.5% to $1.8 billion as of Sept. 30, up from $1.6 billion a year earlier, while defined contribution plan assets rose 10% to $1.1 billion, up from $1 billion.

Defined benefit assets declined 11.1% to $1.6 billion as of Nov. 1, a result of the market turmoil during October. Asset figures for the defined contribution plan were not available. The asset mix was not altered as a result of the market activity.

**Equity managers:** Cambiar; First Manhattan; Hotchkis and Wiley; Lincoln; McCowan; Sit; and Weiss, Peck & Greer.

**Fixed-income managers:** Sanford C. Bernstein; W.R. Huff; J.P. Morgan; and Pacific Investment.

**Real estate managers:** LaSalle; PMRealty; RREEF.

The master trustee is National Bank of Detroit; the investment consultant is Frank Russell.

The key person overseeing the investment management of the fund is David J. Dykstra, director-pension assets.

## Allied-Signal

| | ($ millions) |
|---|---|
| Total assets | 6,808 |
| Defined benefit | 4,808 |
| Thrift or savings/401(k) | 2,000 |
| Employer contributions | na |
| Benefit payments | na |
| In-house assets: | |
| Equities | 500 |
| Fixed income | 500 |
| Short term | 400 |
| Passive investments: | |
| Indexed stocks | 400 |
| GICs | 180 |
| Alternative investments: | |
| International equities | 300 |
| Venture capital | 30 |
| Oil and gas | 30 |
| LBOs | 30 |
| Real estate equity | 250 |
| Hedging devices: | |
| Stock options | Y |
| Bond options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 56% |
| Bonds | 28% |
| Cash equivalents | 9% |
| Real estate equity | 5% |
| Other | 2% |

MORRISTOWN, N.J. — The retirement plan assets at Allied-Signal increased 3.2% to $6.808 billion from $6.6 billion for the year ended Sept. 30.

Defined benefit plan assets, which stood at $4.808 billion Sept. 30 dropped to about $4.1 billion Oct. 30, a decline of 14.7%. The Oct. 19 stock market plunge resulted in an asset allocation of 45% stocks, 35% bonds, 11% cash, 7% real estate equity and 2% other.

**Equity managers** (Domestic): Bankers Trust; Baron Capital; BMI Capital; Chesapeake Capital; Corinthian Capital; Delaware Investment; Dodge & Cox; Johnson, Valiant & Broadfoot; KR Capital; Kurtz Capital; John A. Levin; Lincoln Capital; Lord Abbett; S Squared; Donald Smith; State Street; Target Investors; Thomson, Horstmann & Bryant; Towneley; Verus Capital; Weiss, Peck & Greer; and Westport Asset Management.

(International): Arnhold & S. Bleichroeder; Batterymarch; and Morgan Grenfell.

**Fixed-income managers:** Delaware; W.R. Huff; J.P. Morgan; Solomon Asset.

**Real estate managers:** Aetna; Copley; Hancock; PCA; Prudential; RREEF; TCW; Travelers.

The master trustee is Northern Trust.

Key personnel overseeing the investment management of the fund are Edward T. Tokar Jr., vice president-investments; Mark E. Smith, senior fixed-income portfolio manager and administrator; and Jay W. Burden, manager of fixed-income investments and administrator.

## Aluminum Company of America

| | ($ millions) |
|---|---|
| Total assets | 3,072 |
| Defined benefit | 2,703 |
| 401(k) | 369 |
| Employer contributions | 157 |
| Benefit payments | na |
| *P&I Age estimate | |

PITTSBURGH — *Pensions & Investment Age* estimates the Aluminum Co. of America's total plan assets grew 13.7% for the 12 months ended Sept. 30, to $3.072 billion from $2.703 billion.

The estimate is based on December 1986 figures provided by Money Market Directory.

Alcoa would not identify its managers. The list that follows is from the Money Market Directory.

**Equity managers:** Capital Guardian (domestic and international); Franklin Portfolio; Prudential Asset; and Rosenberg Institutional.

**Bond managers:** Fischer, Francis, Trees & Watts and STW.

**Index managers:** State Street Bank and Wells Fargo Investment.

**Real estate managers:** Coldwell Banker and RREEF.

**Venture capital manager:** Capital Guardian.

Joseph Pellegrino, assistant treasurer, oversees plan investments.

## American Airlines

| | ($ millions) |
|---|---|
| Total assets | 3,130 |
| Defined benefit | 1,600 |
| Defined contribution | 1,300 |
| 401(k) | 200 |
| Other | 30 |
| Employer contributions | 120 |
| Benefit payments | 150 |
| In-house assets: | |
| Equities | 70 |
| Fixed income | 780 |
| Short term | 50 |
| Passive investments: | |
| Dedicated/immunized | 750 |
| GICs | 30 |
| Alternative investments: | |
| International equities | 125 |
| International bonds | 50 |
| Mortgage-backed securities | 200 |
| Asset mix: | |
| Stocks | 45% |
| Bonds | 47% |
| Cash equivalents | 8% |

FORT WORTH, Texas — Total employee benefit assets at American Airlines increased 7.2% in the 12 months ended Sept. 30, to $3.1 billion from $2.892 billion. Because of the market volatility during October, total assets dropped 9.7% to $2.8 billion Nov. 1.

**Equity managers:** AMR Investment; Atlanta Capital; Barrow, Hanley; Capital Guardian; Dewey Square; Dreman; Ganucheau, Stupfel & Brumley; Hotchkis & Wiley; Independence; United Capital Management.

**Balanced managers:** AMR Investment; Penmark; First RepublicBank; Barrow, Hanley; Hotchkis & Wiley; Capital Guardian; and Independent.

**International managers:** Morgan Grenfell; N.M. Rothschild; and Rowe-Price Fleming.

**Options manager:** Analytic Investments.

The master trustee is First RepublicBank Dallas.

### Largest corporate funds
($ millions)

| Fund | Assets |
|---|---|
| General Motors | 40,000 |
| AT&T | 37,577 |
| General Electric | 27,300 |
| IBM | 22,457 |
| Ford Motor | 19,800 |
| E.I. du Pont de Nemours | 16,868 |
| NYNEX | 14,336 |
| Ameritech | 12,592 |
| Bell Atlantic | 11,502 |
| GTE | 11,065 |
| USX | 10,150 |
| BellSouth | 10,070 |
| Pacific Telesis Group | 9,867 |
| Rockwell International | 9,200 |
| Exxon | 8,505 |
| Eastman Kodak | 8,264 |
| Sears, Roebuck | 8,225 |
| U S WEST | 8,046 |
| Lockheed | 8,025 |
| Southwestern Bell | 7,231 |
| United Technologies | 6,946 |
| Shell Oil | 6,918 |
| Allied-Signal | 6,808 |
| McDonnell Douglas | 6,800 |
| Boeing | 6,538 |
| **TOTAL** | **335,090** |

### Largest public funds
($ millions)

| Fund | Assets |
|---|---|
| California Public Employees' Retirement System | 44,036 |
| New York State & Local Retirement Systems | 38,747 |
| New York City Retirement Systems | 33,633 |
| California State Teachers Retirement System | 23,714 |
| New York State Teachers Retirement System | 23,035 |
| New Jersey Division of Investment | 19,785 |
| Teacher Retirement System of Texas | 18,930 |
| Michigan State | 16,680 |
| Wisconsin Investment Board | 15,632 |
| Ohio Public Employees Retirement System | 14,985 |
| Ohio State Teachers Retirement System | 14,821 |
| Florida State Board of Administration | 13,700 |
| North Carolina Retirement Systems | 12,446 |
| Pennsylvania Public School Employes | 12,021 |
| Washington State Investment Board | 10,600 |
| Minnesota State Board of Investment | 9,706 |
| Oregon Public Employes | 8,789 |
| Maryland State Retirement and Pension Systems | 8,274 |
| Los Angeles County | 8,262 |
| Pennsylvania State Employes' Retirement System | 7,965 |
| Colorado Public Employees' Retirement | 7,802 |
| Virginia Supplemental Retirement System | 7,610 |
| Georgia Teachers Retirement System | 7,080 |
| Illinois Teachers' Retirement System | 7,053 |
| Alabama Retirement System | 6,233 |
| **TOTAL** | **391,539** |

Key personnel overseeing the investment management of the fund are William F. Quinn, president-AMR Investment Services; Thomas M. Stawicki, vice president-trust investments; and Robert J. Chiore, investment analyst.

## American Electric Power Co.

| | ($ millions) |
|---|---|
| Total assets | 1,465 |
| Defined benefit | 1,107 |
| Thrift or savings | 345 |
| PAYSOP | 13 |
| Employer contributions | na |
| Benefit payments | na |
| Passive investments: | |
| Indexed stocks | 161 |
| Alternative investments: | |
| Venture capital | 26 |
| Real estate equity | 9 |
| Hedging devices: | |
| Stock options | Y |
| Bond options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 55% |
| Bonds | 20% |
| Cash equivalents | 22% |
| Real estate equity | 1% |
| Other | 2% |

COLUMBUS, Ohio — American Electric Power Co. had $1.465 billion in employee benefit assets as of Sept. 30, an increase of 38.2% from $1.06 billion the previous year. The company had $1.107 billion in defined benefit assets as of Sept. 30.

**Equity managers:** BEA; Manning and Napier; Meeder; Metropolitan; Mount Vernon; W.H. Reaves; Fayez Sarofim; Thorndike, Doran, Paine & Lewis; and Robert Torray.

**Fixed-income managers:** BEA; Manning and Napier; MEG; Fayez Sarofim; and Thorndike, Doran, Paine & Lewis

**Real estate managers:** FS Realty and Metropolitan Life.

**Venture capital manager:** John Hancock.

The master trustee is Irving Trust Co.; the investment consultant is Buck.

The key person overseeing the investment management of the fund is Joseph H. Shepard Jr., manager-system corporate benefit funds.

## American Information Technologies Corp.

| | ($ millions) |
|---|---|
| Total assets | 12,592 |
| Defined benefit | 11,157 |
| 401(k) | 1,435 |
| Benefit payments | 400 |
| In-house assets: | |
| Equities | 1,075 |
| Short term | 1,900 |
| Passive investments: | |
| Indexed stocks | 1,075 |
| Indexed bonds | 650 |
| Dedicated/immunized | 2,790 |
| Alternative investments: | |
| International equities | 750 |
| International bonds | 125 |
| Venture capital | 65 |
| Real estate equity | 330 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 50% |
| Bonds | 41% |
| Cash equivalents | 5% |
| Real estate equity | 3% |
| Other | 1% |

CHICAGO — Ameritech's employee benefit assets rose 20% in the year ended Sept. 30, to $12.592 billion from $10.478 billion, according to the company. Officials would not comment on changes in the total assets or asset mix after the October market crash.

The company said it had 19 equity managers and three bond managers, none of which it would identify. The following list of managers is from the Money Market Directory.

**Managers:** AmeriTrust; BankOne Indianapolis; Baring International; Capital Guardian; CIGNA; Concord Capital; Delaware Investment Advisers; First Chicago Investment; First Wisconsin Trust; General American Life; David J. Greene; IDS Advisory; IDS Financial Services; IDS International; Indiana National Bank; Jennison Associates; Lincoln Capital; Loomis, Sayles; Lord, Abbett; National City Bank; National Investment Services of America; Oxford Partners; and RCM Capital Management.

The master trustee is Harris Trust; the investment consultant is Callan Associates.

The key person overseeing the investment management of the fund is Donald W. Phillips, director-investment management.

## American Stores Co.

| | ($ millions) |
|---|---|
| Total assets | 1,611 |
| Defined benefit | 96 |
| Defined contribution | 1,515 |
| Employer contributions | 65 |
| Benefit payments | 70 |
| Portfolio insurance | 225 |
| Alternative investments: | |
| International equities | 325 |
| Real estate equity | 64 |
| Hedging devices: | |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 57% |
| Bonds | 30% |
| Cash equivalents | 9% |
| Real estate equity | 4% |

SALT LAKE CITY — American Stores Co.'s total employee benefit assets grew 28.5% to $1.611 billion during the year ended Sept. 30 from $1.254 billion.

Total assets fell 11% to $1.427 billion as of Oct. 31. After the Oct. 19 stock market crash, the asset mix changed significantly. The asset mix as of Oct. 31 was 39.8% equities, down from 57%; 38% bonds, up from 30%; 16.9% cash, up from 9%; and 5.3% real estate, up from 4%.

**Equity managers:** Bankers Trust; Institutional Capital; J.P. Morgan; RCM; Templeton Investment Counselors; and Templeton World Fund.

**Fixed-income managers:** Bankers Trust; Neuberger Berman; PIMCO; and Western Asset Management.

**Real estate managers:** Coldwell Banker; John Hancock; La Salle; and RREEF.

**Other:** Equitable.

The master trustee is Bankers Trust; the investment consultant is Evaluation Associates.

Key personnel overseeing the investment management of the fund are Michael T. Miller, senior vice president; Thomas M. Nielsen, vice president; and Duane D. Whitney, controller.

Master trust: Aug. 22.

## American Telephone & Telegraph Co.

| | ($ millions) |
|---|---|
| Total assets | 37,577 |
| Defined benefit | 30,838 |
| Thrift or savings/401(k) | 5,897 |
| ESOP | 842 |
| Employer contributions | 530 |
| Benefit payments | 1,100 |
| In-house assets: | |
| Other | 1,094 |
| Passive investments: | |
| Indexed stocks | 9,679 |
| Indexed bonds | 3,691 |
| Dedicated/immunized | 266 |
| Alternative investments: | |
| International equities | 1,771 |
| Venture capital | 383 |
| Oil and gas | 236 |
| LBOs | 206 |
| Private placements | 716 |

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| | |
|---|---|
| Real estate equity | 3,217 |
| Hedging devices: | |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 56% |
| Bonds | 25% |
| Real estate equity | 10% |
| International/alternative | 9% |

NEW YORK — AT&T Co.'s total benefit assets and pension assets climbed 23.9% to $37.577 billion from $30.34 billion for the year ended Sept. 30. Total defined benefit assets after the October market drop were $26.893 billion, a decline of 12.8%. Changes in the asset mix were market-driven. Equities slipped to 49% of assets; bonds rose to 29%, real estate became 12% and other categories accounted for the remainder of the mix.

**Managers:** Abbott Capital; ABD; Aldrich, Eastman; American Express; Coldwell Banker; Corporate Property Investors; J.W. O'Connor & Co.; Bankers Trust; Batterymarch; Boston Energy; Boston Co. Real Estate; Brown Brothers Harriman; Capital Guardian; Chase; Chemical; Citibank; Copley; Denver; Eastdil; Equitable; Favia, Hill; Fidelity International; First National Bank of Atlanta; First Chicago; Goldman Sachs; GT Capital; John Hancock; Heitman; First RepublicBank; INVESCO; Investment Counselors of Maryland; Ivory & Sime; Jennison; Karsten Institutional Realty; Lincoln; Loomis, Sayles; Lord, Abbett; Manufacturer's Hanover; Mellon Bank; Morgan Grenfell; J.P. Morgan; Pacific Investment; Prudential; RREEF; RCM; Standish, Ayer & Wood; State Street Bank; State Street Research; Thorndike, Doran, Paine & Lewis; United Capital; United States Trust; First Wachovia; Wells Fargo Bank; and Western Asset.

Trustees for the AT&T master pension trust are Bankers Trust, Chase Manhattan, Citibank, Mellon Bank, Northern Trust and State Street Bank.

Key personnel overseeing the investment management of the fund are David P. Feldman, corporate vice president; Robert E. Angelica, director; and Ronald R. Roessler, director.

## Amoco Corp.

| ($ millions) | |
|---|---|
| Total assets | 4,300 |
| Defined benefit | 2,515 |
| Thrift or savings | 1,567 |
| ESOP | 218 |
| Employer contributions | 48 |
| Benefit payments | 197 |
| In-house assets: | |
| Equities | 453 |
| Passive investments: | |
| Indexed stocks | 211 |
| Alternative investments: | |
| International equities | 262 |
| Real estate equity | 102 |
| Hedging devices: | |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 63% |
| Bonds | 8% |
| Cash equivalents | 11% |
| Real estate equity | 4% |
| Other | 14% |

CHICAGO — Amoco Corp.'s employee benefit assets grew 2.9% in the 12 months ended Sept. 30, to $4.3 billion from $4.179 billion. Defined benefit plan assets alone increased 7.6%, to $2.515 billion from $2.338 billion. Amoco officials declined to state the effect of the October market drop on total assets or the asset mix.

**Equity managers:** CMB; Chase Manhattan; Dimensional; Fidelity Management Trust; Forstmann-Leff; Franklin Portfolio; Fayez Sarofim; and State Street Research.

**Fixed-income managers:** Delaware Investment and Pacific Investment.

**Real estate manager:** Equitable.

**International managers:** Fidelity International and State Street Bank.

The master trustee is Chase Manhattan.

Key personnel overseeing the investment management of the fund are Marvin L. Damsma, director-pension fund administration, and John S. Ruey, administrative manager-investments.

## Arizona State Retirement System

| ($ millions) | |
|---|---|
| Total assets | 6,182 |
| Defined benefit | 6,182 |
| Employer contributions | 142 |
| Benefit payments | 169 |
| In-house assets: | |
| Cash | 32 |
| Passive investments: | |
| Indexed stocks | 1,085 |
| Indexed bonds | 557 |
| Alternative investments: | |
| International equities | 503 |
| Mortgages | 229 |
| Mortgage-backed securities | 128 |
| Asset mix: | |
| Stocks | 48% |
| Bonds | 39.5% |
| Cash equivalents | 6.5% |
| Mortgages | 4% |
| Mortgage-backed securities | 2% |

PHOENIX, Ariz. — The Arizona State Retirement System had $6.182 billion in retirement assets as of Sept. 30, a 12.3% increase from the $5.507 billion reported as of June 30, 1986. All the assets are in a defined benefit plan. Because of the market volatility in October, the fund had assets of $5.798 billion Oct. 31, a drop of 6.2%, according to C. Douglas Lemon, investment director.

**Balanced managers:** Boston Co.; Criterion; Fiduciary Trust; IDS Advisory; INVESCO; J.P. Morgan; Wells Fargo.

**Equity manager:** Bernstein-Macaulay.

**Fixed-income manager:** Duff & Phelps.

**International/global manager:** State Street; Warburg.

**Mortgage manager:** Valley National Bank.

The master custodian is Mellon Bank; the investment consultant is William M. Mercer-Meidinger-Hansen.

Key personnel overseeing the investment management of the fund are Edwin Gallison, director, and C. Douglas Lemon Jr., investment director.

## Arkansas Teacher Retirement System

| ($ millions) | |
|---|---|
| Total assets | 1,774 |
| Defined benefit | 1,774 |
| Employer contributions | 84 |
| Benefit payments | 68 |
| In-house assets: | |
| Short term | 270 |
| Alternative investments: | |
| Mortgages | 67 |
| Mortgage-backed securities | 12 |
| Asset mix: | |
| Stocks | 35.1% |
| Bonds | 42.7% |
| Cash equivalents | 17.3% |
| Mortgages | 4.2% |
| Mortgage-backed securities | 0.7% |

LITTLE ROCK, Ark. — The Arkansas Teacher Retirement System's benefit assets increased 19.1% to $1.774 billion from $1.489 billion for the year ended Sept. 30.

Total assets fell 6.2% to $1.664 billion from Sept. 30 through Oct. 31, according to Mavolene C. Booth, retirement fund investment manager.

**Equity managers:** Oppenheimer Capital.

**Fixed-income managers:** First Commercial Bank.

The master custodian is First Commercial Bank. The investment consultant is E.F. Hutton.

Ms. Booth oversees the investment management of the fund.

## Armco Inc.

| ($ millions) | |
|---|---|
| Total assets | 1,999 |
| Defined benefit | 1,795 |
| Profit-sharing | 1 |
| Thrift or savings | 156 |
| 401(k) | 41 |
| ESOP | 4 |
| Employer contributions | 75 |
| Benefit payments | 174 |
| In-house assets: | |
| Fixed income | 426 |
| Short term | 64 |
| Passive investments: | |
| Indexed stocks | 233 |
| Dedicated/immunized | 426 |
| GICs | 30 |
| Alternative investments: | |
| International equities | 51 |
| Other international | 30 |
| Venture capital | 10 |
| Private placements | 10 |
| Real estate equity | 11 |
| Mortgage-backed securities | 88 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 58.7% |
| Bonds | 18.8% |
| Cash equivalents | 3.7% |
| Real estate equity | 0.6% |
| Mortgage-backed securities | 4.9% |
| GICs | 1.6% |
| Other | 11.7% |

PARSIPPANY, N.J. — Armco Inc. had total employee benefit assets of $1.999 billion as of Sept. 30, an increase of 16.8% from $1.712 billion the previous year. Defined benefit assets totaled $1.795 billion as of Sept. 30, an increase of 16.2% from $1.545 billion a year earlier.

As of Nov. 1, defined benefit assets had declined 11.6% to $1.586 billion because of the market's activity during October. A company executive said no changes in the asset mix are anticipated.

**Equity managers:** Alliance; Capital Guardian; Columbus Circle; Lincoln; Mellon Capital; Miller, Anderson & Sherrerd; and Oechsle.

**Fixed-income manager:** Armco Investment.

**Real estate manager:** RREEF.

**GIC manager:** John Hancock.

**Private placements manager:** Equitable.

The master trustee is Chase Manhattan Bank; the investment consultant is SEI.

The key person overseeing the investment management of the fund is Dennis F. Furey, general manager-pension investments.

## Army and Air Force Exchange Service

| ($ millions) | |
|---|---|
| Total assets | 1,305 |
| Defined benefit | 1,277 |
| Thrift or savings | 28 |
| Employer contributions | 65 |
| Benefit payments | 52 |
| Portfolio insurance | 48 |
| Passive investments: | |
| Indexed stocks | 200 |
| Alternative investments: | |
| International equities | 114 |
| International bonds | 28 |
| Venture capital | 11 |
| Private placements | 123 |
| Real estate equity | 97 |
| Mortgage-backed securities | 22 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 65% |
| Bonds | 8% |
| Cash equivalents | 3% |
| Real estate equity | 8% |
| Mortgage-backed securities | 2% |
| Annuities | 10% |
| Other | 4% |

DALLAS — Total employee benefit assets at the Army and Air Force Exchange Service increased 19.5% in the year ended Sept. 30, to $1.305 billion from $1.092 billion.

**Equity managers:** Independence; Citicorp; Dimensional Fund Advisors; Trinity; Wells Fargo; Nicholas-Applegate; Citibank-London; Morgan Grenfell; State Street Bank; and Westport.

**Fixed-income managers:** Robert C. Brown; Citicorp; Hibernia; Dimensional Fund Advisors; and PCM International.

**Real estate managers:** Aetna; John Hancock; J.P. Morgan; Goldman Sachs; JMB; LaSalle; and RREEF.

**Insurance contract managers:** Aetna and John Hancock.

**Participating mortgage manager:** Aetna.

**Venture capital manager:** Abbott Capital and John Hancock.

**Options manager:** Balch, Hardy & Scheinman.

The investment consultant is SEI.

Key personnel overseeing the investment management of the fund are Kenneth C. Weaver, assistant comptroller-insurance division; Louis H. Bornmann II, assistant chief-insurance division; and Patricia M. Hogan, chief, accounting branch-insurance division.

## Atlantic Richfield Co.

| ($ millions) | |
|---|---|
| Total assets | 3,236 |
| Defined benefit | 2,357 |
| Thrift or savings | 411 |
| 401(k) | 251 |
| PAYSOP | 217 |
| Employer contributions | na |
| Benefit payments | na |
| In-house assets: | |
| Equities | 1,182 |
| Fixed income | 209 |
| Short term | 75 |
| Real estate | 23 |
| Passive investments: | |
| GICs | 38 |
| Alternative investments: | |
| International equities | 573 |
| International bonds | 71 |
| Venture capital | 42 |
| Oil and gas | 5 |
| Private placements | 49 |
| Real estate equity | 190 |
| Mortgages | 23 |
| Mortgage-backed securities | 34 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 68% |
| Bonds | 16% |
| Cash equivalents | 4% |
| Real estate equity | 8% |
| Mortgages | 1% |
| Mortgage-backed securities | 1% |
| GICs | 1% |
| Venture capital/private placements | 1% |

LOS ANGELES — Atlantic Richfield Co.'s total assets grew 19.9% to $3.236 billion from $2.7 billion for the year ended Sept. 30, mainly because of a 32% increase in defined contribution plan assets. The defined benefit plan grew almost 16%, but the stock market crash wiped out almost all gains as the the plan lost 15% of assets during October. The affect of the market crash on the total portfolio mix reduced stocks by a few percentage points while bonds and cash portions made up the difference.

**Equity managers:** Capital Guardian; Emerging Markets; G.T. Capital; Rowe-Price, Fleming; Warburg.

**Fixed-income managers:** Baring; Fiduciary Trust; MacKay-Shields; J.P. Morgan, Solomon Asset Management.

**Real estate managers:** Aldrich, Eastman & Waltch; Fox Group; Lehndoff & Babson.

The master trustee is State Street.

The key person overseeing the investment management of the fund is E. Kent Damon Jr., vice president and investment officer.

# B

## Bakery & Confectionery Union & Industry International Pension Fund

| ($ millions) | |
|---|---|
| Total assets | 2,000 |
| Defined benefit | 2,000 |
| Employer contributions | 160 |
| Benefit payments | 140 |
| Passive investments: | |
| Indexed stocks | 60 |
| Indexed bonds | 40 |
| Dedicated/immunized | 80 |
| GICs | 132 |
| Alternative investments: | |
| Mortgages | 80 |
| Asset mix: | |
| Stocks | 38.9% |
| Bonds | 38.2% |
| Cash equivalents | 8.9% |
| Mortgages | 4.4% |
| GICs | 7% |
| Other | 2.6% |

KENSINGTON, Md. — The Bakery & Confectionery Union & Industry International Pension Fund's total assets increased 25% to $2 billion as of Sept. 30, from $1.6 billion a year earlier. As a result of the October market drop, assets totaled $1.7 billion as of Oct. 31, a drop of 15%.

**Balanced managers:** Lazard Freres; Loomis, Sayles; M.D. Sass, Stein, Roe & Farnham; Trust Co. of the West; and Wertheim.

The master custodian is National Bank of Washington.

John Fleming is administrative director of the fund.

## Baltimore City Retirement Systems

| ($ millions) | |
|---|---|
| Total assets | 1,400 |
| Defined benefit | 1,400 |
| Employer contributions | 42 |
| Benefit payments | 57 |
| Passive investments: | |
| GICs | 74 |
| Alternative investments: | |
| Real estate equity | 3 |
| Mortgages | 23 |
| Hedging devices: | |
| Stock options | Y |
| Asset mix: | |
| Stocks | 29% |
| Bonds | 47% |
| Cash equivalents | 16% |
| Real estate equity | 1% |
| Mortgages | 2% |
| GICs | 5% |

BALTIMORE — Total assets of the the Baltimore City Retirement Systems increased 22% in the year ended Sept. 30, to $1.4 billion from $1.146 billion. Because of the market volatility, assets declined 14.3% to $1.2 billion as of Oct. 31.

**Equity managers:** Addison; Ariel; Alex. Brown; Crawford; Delaware Investment; Dietche & Field; Dreman; Eagle; Investment Counselors of Maryland; Oppenheimer Capital; Putnam Advisory; Fayez Sarofim; and Edward A. Viner.

**Fixed-income managers:** Mercantile Safe Deposit; Oppenheimer; and Sarofim.

**Real estate managers:** Heitman and JMB.

**GIC managers:** Lincoln National; State Mutual Life; State Street Research; and Transamerica Occidental.

**Other managers:** Balch Hardy & Scheinman and Bank of Baltimore.

The master custodian is Mercantile Safe; the investment consultant is Evaluation Associates.

Key personnel overseeing the investment management of the fund are Ernest J. Glinka, administrator; Thomas P. Taneyhill, deputy administrator; and Charles W. Parker, accounting manager.

## Bechtel Power Corp.

| ($ millions) | |
|---|---|
| Total assets | 1,478 |
| Defined contribution | 1,478 |
| Employer contributions | na |
| Benefit payments | na |
| Portfolio insurance | 877 |
| Passive investments: | |
| Indexed stocks | 91 |
| GICs | 32 |
| Alternative investments: | |
| International equities | 187 |
| International bonds | 26 |
| Real estate equity | 58 |
| Hedging devices: | |
| Stock options | Y |
| Bond options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 59% |
| Bonds | 21% |
| Cash equivalents | 14% |
| Real estate equity | 4% |
| GICs | 2% |

SAN FRANCISCO — Bechtel Power Corp. had $1.478 billion in total employee benefit assets as of Sept. 30, an increase of 5.6% from $1.4 billion the previous year. All of the money is in defined contribution assets.

Between Sept. 30 and Nov. 1, assets declined 10.8% to $1.318 billion. The asset mix as of Nov. 1 was not available.

**--Equity managers:** Batterymarch; Columbia; Dodge & Cox; Dreman Value; G.T. Capital; J.P. Morgan; Morgan Grenfell; Sit Investment; Wellington Trust; Wells Fargo.

**Fixed-income managers:** Columbia Trust; J.P. Morgan; Pacific Investment; Sierra Asset Management.

**Real estate managers:** Aetna; Corporate Property Investors; Prudential; RREEF.

**GIC manager:** Sierra Asset.

The master trustee is Bankers Trust Co.

Key personnel overseeing the investment management of the fund are D. L. Redo and V.P. Kuhn Jr., investment managers.

## Bell Atlantic Corp.

| ($ millions) | |
|---|---|
| Total assets | 11,502 |
| Defined benefit | 9,974 |
| Thrift or savings | 430 |
| 401(k) | 824 |
| ESOP | 274 |

PHILADELPHIA — Bell Atlantic Corp.'s employee benefit assets rose 21% in the year ended Sept. 30, to $11.502 billion from $9.5 billion. Bell Atlantic executives would not release asset figures as of Oct. 31, nor would they identify the fund's managers.

The following listing of investment managers is from the Money Market Directory.

**Managers:** Abbott Capital; Aldrich Eastman & Waltch; AmeriTrust; Aronson & Fogler; Bankers Trust/Des Moines; Bankers Trust — Investment Management Group; Brown Brothers Harriman; Capital Guardian; Citicorp Investment; Copley; Corporate Property Investors; Richard Ellis; First Manhattan; Fischer Francis Trees & Watts; Franklin Portfolio; Geewax Terker; Grantham Mayo Van Otterloo; Jennison Associates; La Salle; Lord, Abbett; Matrix; Mellon Capital; Mellon Real Estate; Mercantile Bank; Metropolitan Life; Miller Anderson & Sherrerd; The New England; J.W. O'Connor; Pacific Investment Management; PRIMECAP; Rosenberg Institutional Equity; Walter Scott & Partners; Walter Scott International; Sovran Bank; Sovran Capital; Standish Ayer & Wood; State Street Bank; Thorndike Doran Paine & Lewis; Travelers Insurance; Wellington Investment Advisors; and Wellington Management.

According to the company, the master trustee is Mellon Bank and the investment consultant, Frank Russell.

Key personnel overseeing the investment management of the fund are William O. Albertini, vice president-secretary and treasurer; Joseph A. Bobrowski, director-trust administration; and Edward P. Rennie, director-trust investment management.

## BellSouth Corp.

| | ($ millions) |
|---|---|
| Total assets | 10,070 |
| Defined benefit | 8,384 |
| Thrift/savings/401(k)/ESOP | 1,686 |

ATLANTA — BellSouth Corp.'s employee benefit assets rose 15% in the year ended Sept. 30, to $10.07 billion from $8.75 billion.

BellSouth executives would not release further data. The following list of managers is from the Money Market Directory.

**Managers:** Aetna; AmSouth; Bankers Trust; Barnett Banks; Brown Brothers Harriman; C&S Investment; Connecticut General; Dimensional Fund Advisors; First Kentucky; First Tennessee Investment; First Union National Bank Capital Management; First Wachovia; INVESCO; Jennison Associates; Loomis, Sayles; Massachusetts Mutual; Metropolitan Life; Mutual Benefit; NCNB; PIMCO; Provident National Assurance; Prudential Asset Management; State Street Bank; TREET; Third National Bank; Vanguard Group; and Wells Fargo Investment.

The master trustee is First Wachovia.

The key person overseeing the investment management of the fund is Kincaid Patterson, director-trust assets.

## Bethlehem Steel Corp.

| | ($ millions) |
|---|---|
| Total assets | 2,699 |
| Defined benefit | 2,699 |
| Employer contributions | 150 |
| Benefit payments | 480 |
| In-house assets: | |
| Equities | 975 |
| Fixed income | 1,367 |
| Short term | 187 |
| Other | 170 |
| Asset mix: | |
| Stocks | 36% |
| Bonds | 51% |
| Cash equivalents | 7% |
| Other | 6% |

BETHLEHEM, Pa. — Total assets slid 7.3% to $2.699 billion from $2.913 billion for the year ended Sept. 30. An additional 7.4% — or $200 million — was lost during the stock market crash. The fund's portfolio shifted 5% out of stocks and into bonds as a result of the crash.

The fund is managed internally except for a very small GIC account with Prudential. The master custodian is Bankers Trust.

Gerard Mead, pension fund manager, oversees investments.

## Boeing Co.

| | ($ millions) |
|---|---|
| Total assets* | 6,538 |
| Defined benefit | 3,940 |
| Thrift or savings | 2,598 |
| Employer contributions | na |
| Benefit payments | na |

*From Money Market Directory

SEATTLE — Boeing Co. had $6.538 billion in total assets as of June 30, according to the Money Market Directory, an apparent decrease of 9.2% from the $7.2 billion the company reported as of Sept. 30, 1986.

According to the Money Market Directory, the managers are as follows.

**Managers:** Aetna; Alliance; Beekman; Robert C. Brown; Cambiar; Capital Guardian; Cashman, Farrell; Chase Investors; Chase Manhattan Bank; First Chicago Investment; First Interstate/Washington; Geewax, Terker; IDS Advisory; IDS Financial; INVESCO; J.P. Morgan; Massachusetts Financial Services; McKee Investment; Olympic Capital; PIMCO; PRIMECAP; Provident Capital; RCM; Roanoke Asset; Frank Russell Trust; Seattle-First National Bank; Security Pacific Investment; Sirach/Flinn, Elvins; Sit Investment; Cabanne Smith; TCW Asset; ValueQuest; Waite & Correnti;

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The master trustee is Chase Manhattan; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Gary B. Bland, vice president-trust investments, and Elizabeth Marcoux, manager-trust investments.

## Boilermaker Blacksmith National Pension Trust

| | ($ millions) |
|---|---|
| Total assets | 2,230 |
| Defined benefit | 2,230 |
| Employer contributions | 52 |
| Benefit payments | 89 |
| In-house assets: | |
| Short term | 25 |
| Passive investments: | |
| Dedicated/immunized | 110 |
| GICs | 74 |
| Alternative investments: | |
| Real estate equity | 200 |
| Asset mix: | |
| Stocks | 44% |
| Bonds | 29% |
| Cash equivalents | 14% |
| Real estate equity | 10% |
| GICs | 3% |

KANSAS CITY, Kan. — Total benefit assets and pension assets for the Boilermakers-Blacksmiths National Pension Trust increased 12.4% to $2.23 billion on Sept. 30 from $1.984 billion June 30, 1986.

Total assets as of Oct. 31 dropped to $1.984 billion, a decline of 11%, as a result of the market drop and other factors. Also, the asset mix changed to 38% stocks, while bonds moved to 32%, cash equivalents to 16%, real estate to 11% and GICs to 3%.

**Equity managers:** Atalanta-Sosnoff; Independence; Lazard Freres; Neuberger & Berman; Provident.

**Fixed-income managers:** Financial Counselors; Lehman; Loomis Sayles; Scudder.

**Balanced managers:** Fred Alger; McMorgan; TCW.

**Real estate managers:** Equitable; Karsten; J.P. Morgan; New England; Prudential.

The master custodian is Brotherhood Bank & Trust; the investment consultant is Callan.

Key personnel overseeing the investment management of the fund are Charles E. Woelfer, chairman-board of trustees; Arthur E. Farr, chairman-investment committee; and David E. Hanson, financial director.

C

## California Public Employees' Retirement System

| | ($ millions) |
|---|---|
| Total assets | 44,036 |
| Defined benefit | 44,036 |
| Employer contributions | 2,700 |
| Benefit payments | 1,700 |
| In-house assets: | |
| Equities | 15,748 |
| Fixed income | 16,024 |
| Short term | 2,859 |
| Other | 4,687 |
| Alternative investments: | |
| Private placements | 1,000 |
| Real estate equity | 2,241 |
| Mortgages | 2,447 |
| Mortgage-backed securities | 8,181 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 43.2% |
| Bonds | 20.4% |
| Cash equivalents | 6.5% |
| Real estate equity | 5.1% |
| Mortgages | 5.6% |
| Mortgage-backed securities | 18.6% |
| Other | 0.6% |

SACRAMENTO, Calif. — The California Public Employees' Retirement System had $44.036 billion in total employee benefit assets as of Sept. 30, an increase of 14.4% from the $37.7 billion the previous year.

However, between Sept. 30 and Nov. 1, those assets declined 9.4% to $39.9 billion as a result of the market turmoil during October. The asset mix as of Nov. 1 was 38.2% equities, 42.4% bonds, 0.3% convertibles, 6.1% mortgages, 5.6% real estate equity, 6.8% cash and cash equivalents, and 0.6% in pooled assets in the state treasury commingled fund.

**Equity managers:** Atalanta/Sosnoff; Batterymarch; Citicorp; Dimensional Fund Advisors; Fidelity Bank; First Chicago; Lazard Freres; TSA; and RCM.

**Real estate managers:** Richard Ellis; Equitable; FIA; Heitman; LaSalle; and TCW Realty.

The master custodian is Boston Safe Deposit & Trust; the investment consultant is Wilshire Associates.

Key personnel overseeing the investment management of the fund are Basil J. Schwan, assistant executive officer; Greta E. Marshall, investment manager; and Walton R. Williams, principal investment officer.

## California State Teachers' Retirement System

| | ($ millions) |
|---|---|
| Total assets | 23,714 |
| Defined benefit | 23,714 |
| Employer contributions | 719 |
| Benefit payments | 1,176 |
| Passive investments: | |
| Indexed stocks | 10,700 |
| Indexed bonds | 5,800 |
| Alternative investments: | |
| Private placements | 553 |
| Real estate equity | 633 |
| Mortgages | 1,115 |
| Mortgage-backed securities | 1,646 |
| Asset mix: | |
| Stocks | 56.4% |
| Bonds | 19.8% |
| Cash equivalents | 9.5% |
| Real estate equity | 2.7% |
| Mortgages | 4.7% |
| Mortgage-backed securities | 6.9% |

SACRAMENTO, Calif. — The California State Teachers' Retirement System had $23.714 billion in assets as of Sept. 30, a 22.9% increase from the $19.3 billion the previous year.

Between Sept. 30 and Nov. 1, the system's assets dropped 9.8% to $21.4 billion, a result of the stock market fall.

**Equity managers:** Barrow, Hanley, Mewhinney & Strauss; Denver Investment; Equitable Investment; Pilgrim, Baxter, & Greig; Provident Investment; TCW; Trinity; Wells Fargo; Wilmington Capital; and Wright Investors Services.

**Fixed-income managers:** Manufacturers Hanover.

**Real estate managers:** Equitable Real Estate; Lendorff & Babson; and TCW Realty.

The master custodian is State Street Bank; the investment consultants are Wilshire Associates and Institutional Property Consultants.

The key person overseeing the investment management of the fund is Thomas E. Flanigan, chief investment officer.

## University of California

| | ($ millions) |
|---|---|
| Total assets | 11,228 |
| Defined benefit | 10,329 |
| 403(b) | 899 |
| Employer contributions | na |
| Benefit payments | na |
| In-house assets: | |
| Equities | 8,564 |
| Fixed income | 1,765 |
| Alternative investments: | |
| International equities | 39 |
| Venture capital | 111 |
| Asset mix: | |
| Stocks | 83% |
| Bonds | 17% |

BERKELEY, Calif. — As of Sept. 30, the retirement assets of the University of California totaled $11.228 billion, an increase of 34% from $8.378 billion the previous year. Defined benefit plan assets also grew 34%, to $10.329 billion from $7.687 billion. All assets are managed in-house.

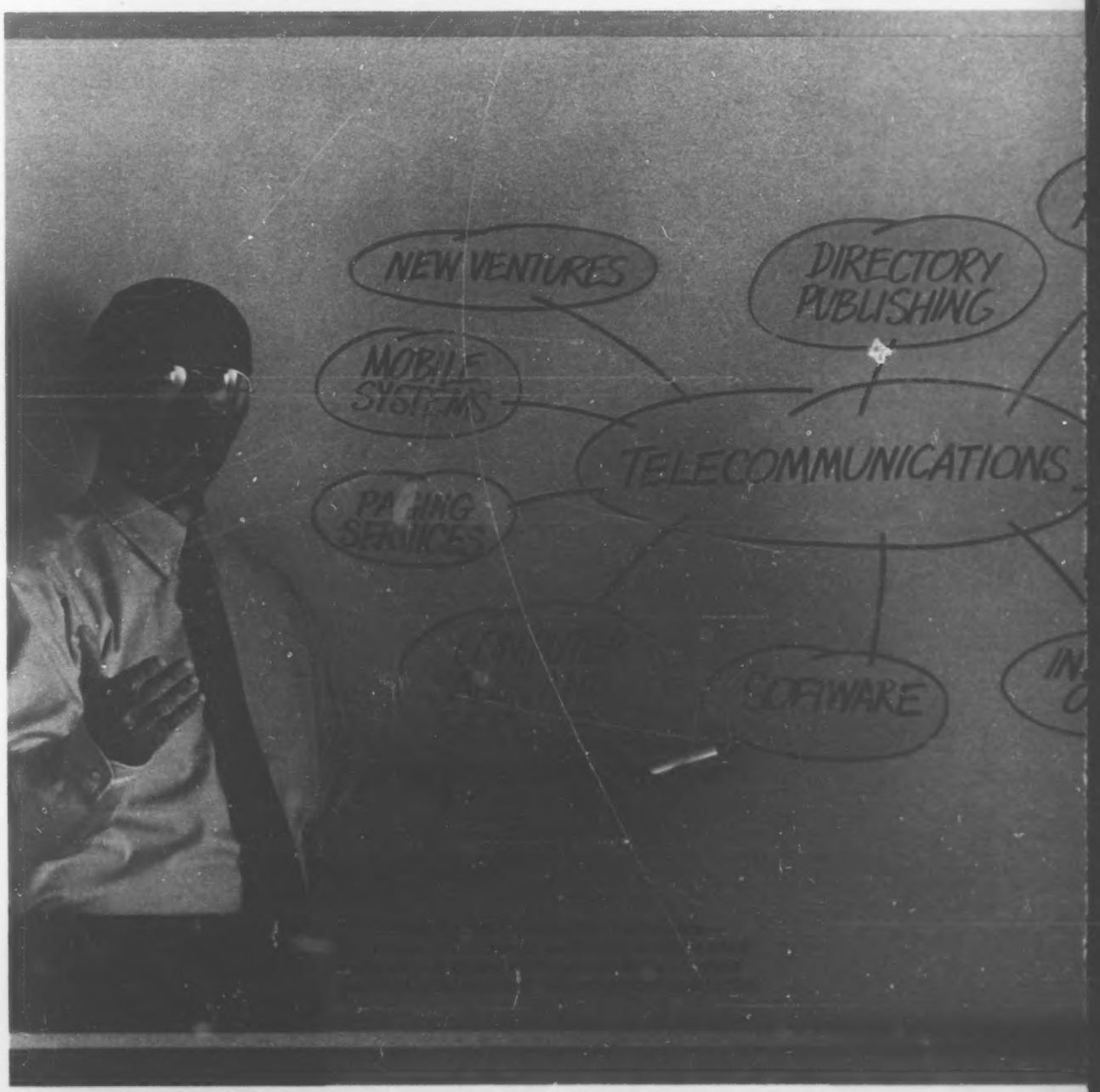
The master custodian is Bankers Trust.

Key personnel overseeing the investment management of the fund are Herbert Gordon, treasurer, and Patricia Small, associated treasurer.

## Caterpillar Inc.

| | ($ millions) |
|---|---|
| Total assets | 4,423 |
| Defined benefit | 3,800 |
| Defined contribution | 487 |
| Profit-sharing | 4 |
| 401(k) | 76 |
| ESOP | 56 |
| Employer contributions | na |


BellSouth



| | |
|---|---|
| Benefit payments | na |
| Passive investments: | |
| Indexed stocks | 196 |
| Dedicated/immunized | 1,004 |
| Alternative investments: | |
| International equities | 430 |
| Oil and gas | 18 |
| Real estate equity | 194 |
| Hedging devices: | |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 41% |
| Bonds | 38% |
| Cash equivalents | 5% |
| Real estate equity | 5% |
| International | 11% |

PEORIA, Ill. — Caterpillar Inc.'s employee benefit assets increased 22.3% to $4.423 billion from $3.617 billion in the 12 months ended Sept. 30. Pension assets alone increased 16.4%. Caterpillar officials declined to say how much the October market decline affected assets.

**Equity managers:** Citicorp, Delaware, Jennison, Mellon Capital, Oppenheimer, PRIMECAP, Trinity.

**Fixed-income managers:** Chase Investors, J.P. Morgan.

**Real estate managers:** Aetna, Equitable, First Chicago, LaSalle Street Fund.

**International managers:** Baring International, Fidelity International.

The master trustee is Northern Trust Co.; the investment consultant is Frank Russell Co.

Key personnel overseeing the investment management of the fund are F.V. Dickinson, manager-risk management and employee benefit funds, and V.A. Kane, benefit funds coordinator.

## Chevron Corp.

| | ($ millions) |
|---|---|
| Total assets* | 6,912 |
| Defined benefit | 4,064 |
| Defined contribution | 2,848 |
| Employer contributions | 20 |
| Benefit payments | na |

*P&I Age estimate

SAN FRANCISCO — *Pensions & Investment Age* estimates Chevron Corp.'s total benefit assets grew 17% in the 12 months ended Sept. 30, to $6.912 billion from the $5.898 billion the company the previous year.

The company would not identify its money managers. The list below is provided by Money Market Directory.

**Retirement plan managers:** Sanford Bernstein; Jennison; Mellon Capital; PIMCO; Prudential; RCM; RREEF; State Street Research; STW; Travelers; and Wells Fargo.

**Profit-sharing/savings plan managers:** American Mutual; Sanford Bernstein; and Jennison.

The master trustee is Bankers Trust, New York; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Sellers Stough, vice president-finance; D.G. Henderson, controller; Neil G. Darling, manager-investment analysis; and Robert G. Williamson, assistant comptroller.

Investment advisers: May 23.

## Municipal Employees' Annuity and Benefit Fund of Chicago

| | ($ millions) |
|---|---|
| Total assets | 1,545 |
| Defined benefit | 1,545 |
| Employer contributions | na |
| Benefit payments | na |
| In-house assets: | |
| Short term | 43 |
| Alternative investments: | |
| International equities | 51 |
| Venture capital | 24 |
| Real estate equity | 86 |
| Mortgages | 50 |
| Mortgage-backed securities | 105 |
| Hedging devices: | |
| Stock options | Y |
| Bond options | Y |
| Asset mix: | |
| Stocks | 38% |
| Bonds | 32% |
| Cash equivalents | 7% |
| Real estate equity | 6% |
| Mortgages | 3% |
| Mortgage-backed securities | 7% |
| International equity | 4 |
| Venture capital | 2% |
| Limited partnerships | 1% |

CHICAGO — The Municipal Employees' Annuity and Benefit Fund of Chicago had defined benefit assets of $1.545 billion as of Sept. 30, an increase of 32.1% from $1.17 billion the previous year.

**Equity managers** (domestic): Ariel; Chicago Asset; Oppenheimer Capital; and Ruggles & O'Neill.

(International): Frank Russell Trust.

**Balanced managers:** Alliance; Bankers Trust; First Chicago Investment; and Trident.

**Real estate managers:** Aetna; Equitable; Prudential Asset; and Trident/Meyer.

**Venture capital managers:** Citicorp Investment; First Analysis; Mesirow Financial; and Pacific Inland.

The master custodian is Continental Illinois National Bank & Trust Co. of Chicago; the investment consultant is Becker, Burke Associates.

Key personnel overseeing the investment management of the fund are Thomas J. Stack, executive director, and Michael J. Nehf, comptroller.

## Public School Teachers' Pension and Retirement Fund of Chicago

| | ($ millions) |
|---|---|
| Total assets* | 3,280 |
| Defined benefit | 3,280 |

*estimate as of Aug. 31, 1987

| | |
|---|---|
| In-house assets: | |
| Equities | 1,604 |
| Fixed income | 1,466 |
| Short term | 210 |
| Asset mix: | |
| Stocks | 48.9% |
| Bonds | 44.7% |
| Cash equivalents | 6.4% |

CHICAGO — The Public School Teachers' Pension and Retirement Fund of Chicago's total employee benefit assets increased approximately 32.7% to an estimated $3.28 billion from $2.471 billion for the 12 months ended Aug. 31.

**Equity adviser:** Capital Supervisors.

**Fixed-income adviser:** Capital Supervisors.

James Ward, executive director, oversees the investment management of the fund.

## Chrysler Corp.

| | ($ millions) |
|---|---|
| Total assets | 4,225 |
| Defined benefit | 3,535 |
| 401(k) | 690 |
| Employer contributions | 70 |
| Benefit payments | 425 |
| Portfolio insurance | 1,073 |
| In-house assets: | |
| Equities | 860 |
| Passive investments: | |
| GICs | 13 |
| Alternative investments: | |
| International equities | 27 |
| Venture capital | 33 |
| Private placements | 2 |
| Real estate equity | 77 |
| Mortgages | 2 |
| Hedging devices: | |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 52% |
| Bonds | 35% |
| Cash equivalents | 8% |
| Real estate equity | 2% |
| Other | 3% |

HIGHLAND PARK, Mich.— Chrysler Corp.'s total benefit assets increased 30% in the year ended Sept. 30, to $4.225 billion from $3.26 billion. Defined benefit assets alone increased 25% during the same period, to $3.535 billion from $2.824 billion.

Because of the market volatility during October, the total assets dropped 10% to $3.792 billion and defined benefit assets dropped 9.7% to $3.191 billion. The company has reduced its concentration in stocks and bonds as a result of market conditions, but did not give new figures.

**Equity managers:** Associated Capital; Atalanta/Sosnoff; Avatar; Bear Stearns; Bernstein; Chase; Columbus Circle; Glickenhaus; Harris Associates; Hutton Capital; Leavy; McKenzie Walker; Merrill Lynch; Manufacturers National Bank of Detroit; Palley-Needelman; Ruggles & O'Neill; Fayez Sarofim; and Trust Company of the West.

**Fixed-income managers:** Bankers Trust; Irving Trust; Morgan Stanley; J.P. Morgan; National Bank of Detroit;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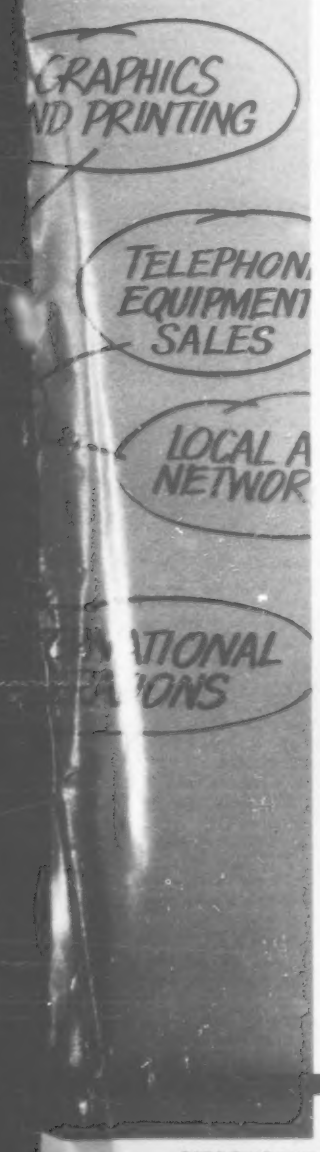


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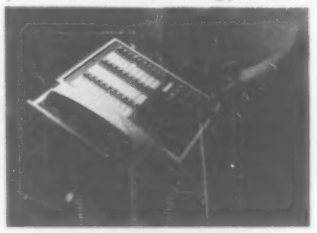

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and Trust Company of the West.

**Real estate managers:** Eastdil; JMB; Prudential; and Rosenberg.

**GIC managers:** Aetna; John Hancock; Massachusetts Mutual; and Travelers.

The master trustee is Bankers Trust.

Key personnel overseeing the investment management of the fund are Frederick W. Zuckerman, vice president and treasurer; Russell P. Flynn, manager of pension fund investments, and Joseph L. Arpin, assistant treasurer.

## CIGNA Corp.

| | ($ millions) |
|---|---|
| Total assets | 1,351* |
| Defined benefit | 1,025 |
| Defined contribution | 5 |
| Profit-sharing | 93 |
| Thrift or savings | 228 |
| Employer contributions | 50 |
| Benefit payments | 60 |
| *defined benefit assets as of June 1987, all others as of December 1986 | |
| Passive investments: | |
| Indexed stocks | 25 |
| Alternative investments: | |
| International equities | 45 |
| Private placements | 9 |
| Real estate equity | 83 |
| Asset mix: | |
| Stocks | 59% |
| Bonds | 18% |
| Real estate equity | 8% |
| Other | 15% |

PHILADELPHIA — CIGNA Corp.'s total employee benefit assets grew about 10.6%, to $1.351 billion as of June 30, 1987, from the $1.221 billion reported Sept. 30, 1986.

The total reported is composed of defined benefit assets of $1.025 billion as of June 30, and defined contribution assets totaling $326 million at the end of 1986. Defined benefit assets increased 7.4% in the nine-month period.

All plan assets are managed by CIGNA affiliates.

Key personnel overseeing the investment management of the fund are James G. Stewart, executive vice president and chief financial officer, and Richard Maine, chief investment officer.

## Citicorp

| | ($ millions) |
|---|---|
| Total assets* | 2,035 |
| Defined benefit | 1,563 |
| Defined contribution | 472 |
| *P&I Age estimate | |

NEW YORK — Citicorp's total benefit assets climbed 19.6% to $2.035 billion as of Sept. 30 from $1.7 billion the previous year, *Pensions & Investment Age* estimates. Defined benefit plan assets increased 21% to an estimated $1.563 billion from $1.292 billion.

## Public Employees Retirement Association of Colorado

| | ($ millions) |
|---|---|
| Total assets | 7,802 |
| Defined benefit | 4,800 |
| Defined contribution | 3,000 |
| 401(k) | 2 |
| Employer contributions | 4 |
| Benefit payments | 250 |
| In-house assets: | |
| Equities | 2,800 |
| Fixed income | 1,000 |
| Short term | 560 |
| Other | 560 |
| Passive investments: | |
| Indexed stocks | 700 |
| GICs | 134 |
| Alternative investments: | |
| Private placements | 150 |
| Real estate equity | 330 |
| Mortgages | 640 |
| Mortgage-backed securities | 1,000 |
| Hedging devices: | |
| Stock options | Y |
| Asset mix: | |
| Stocks | 43% |
| Bonds | 20% |
| Cash equivalents | 4% |
| Real estate equity | 5% |
| Mortgages | 9% |
| Mortgage-backed securities | 17% |
| GICs | 2% |

DENVER — The Public Employees Retirement Association of Colorado's total benefit assets and pension assets rose 23% to $7.8 billion as of Sept. 30. Total assets after the market drop of October fell to $6.9 billion as of Oct. 31.

The custodian is Manufacturers Hanover. The investment consultants are Bankers Trust, Provident National Bank and Capital Trust.

Key personnel overseeing the investment management of the fund are Norman Benedict, deputy executive director; Bud Cosby, director of equity; and Keith Geddis, director of real estate.

## Commonwealth Edison Co.

| | ($ millions) |
|---|---|
| Total assets | 1,951 |
| Defined benefit | 1,951 |
| Employer contributions | na |
| Benefit payments | na |
| In-house assets: | |
| Equities | 685 |
| Fixed income | 692 |
| Short term | 244 |
| Passive investments: | |
| Indexed stocks | 208 |
| Alternative investments: | |
| International equities | 34 |
| International bonds | 13 |
| Private placements | 7 |
| Mortgage-backed securities | 160 |
| Hedging devices: | |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 51% |
| Bonds | 28% |
| Cash equivalents | 13% |
| Mortgage-backed securities | 8% |

CHICAGO — Commonwealth Edison Co. had $1.951 billion in defined benefit assets as of Sept. 30, an increase of 15.6% from $1.687 billion the previous year. As of Nov. 1, the company's assets had fallen 9.3% to $1.77 billion as a result of the market turmoil during October. Fund officials declined comment on changes in the asset mix.

The bulk of the assets, $1.629 billion, is managed internally. The balance of the money is run by various commingled fund and mutual fund managers, which Commonwealth Edison officials declined to identify.

The master custodian is The Northern Trust Co.

Key personnel overseeing the investment management of the fund are Howard R. Carlson, manager of investments; Jack A. Cerney, equity portfolio manager; and Rickard P. Schwartz, fixed-income manager.

## The State of Connecticut Trust Funds

| | ($ millions) |
|---|---|
| Total assets | 5,736 |
| Defined benefit | 5,736 |
| Employer contributions | 600 |
| Benefit payments | 280 |
| In-house assets: | |
| Fixed income | 812 |
| Short term | 380 |
| Other | 104 |
| Passive investments: | |
| Indexed stocks | 557 |
| GICs | 77 |
| Alternative investments: | |
| Real estate equity | 709 |
| Mortgage-backed securities | 32 |
| Asset mix: | |
| Stocks | 46.6% |
| Bonds | 32.4% |
| Cash equivalents | 6.6% |
| Real estate equity | 12.4% |
| Mortgage-backed securities | 0.6% |
| GICs | 1.4% |

HARTFORD, Conn. — Total assets of the State of Connecticut Trust Funds grew 19% to $5.736 billion in the year ended Sept. 30, from $4.819 billion the previous year.

After the Oct. 19 stock market crash, total assets slipped 7% to $5.341 billion. The asset mix shifted to 40% stocks, 39% fixed income, 14% real estate and 7% cash.

**Equity managers:** Aetna; Bankers Trust; Bigler Investment Management; Capital Guardian; Concord Capital; Connecticut National; Franklin; New England Asset Management; One Lewis Street; Oppenheimer; Phoenix Mutual; Provident Capital; Roanoke; WMG; and Wright Investors.

**Fixed-income managers:** Bear Stearns; Loomis, Sayles; PIMCO; Standish, Ayer; State Street Research; and STW.

**Real estate managers:** Aetna; Aldrich, Eastman & Waltch; CIGNA; Copley; Hancock; Heitman; JMB; Morgan Bank; Phoenix Mutual; Public Storage; State Street; RREEF; and TCW.

The master custodian is Boston Safe Deposit; the investment consultant is Buck Pension Fund Services for domestic activities and Wilshire Associates for international.

Key personnel overseeing the investment management of the fund are Frank McDermott, assistant treasurer-investments; Terry A. Helming, investment officer-fixed income; and Robert Staley, investment officer-real estate.

## Consolidated Edison Co. of New York

| | ($ millions) |
|---|---|
| Total assets | 2,853 |
| Defined benefit | 2,645 |
| Thrift or savings | 75 |
| 401(k) | 133 |

NEW YORK — Consolidated Edison Co.'s total benefit assets rose 24% to $2.853 billion as of Sept. 30, compared to $2.297 billion the previous year. Defined benefit assets rose 23% during the 12 months, to $2.645 billion from $2.143 billion. Fund officials would not release figures as of Oct. 31.

The key person overseeing the investment management of the fund is John N. Bell, assistant treasurer.

## Deere & Co.

| | ($ millions) |
|---|---|
| Total assets* | 2,346 |
| Defined benefit | 2,260 |
| Profit-sharing | 1 |
| 401(k) | 72 |
| PAYSOP | 13 |
| Employer contributions | na |
| Benefit payments | na |
| *From Money Market Directory | |

MOLINE, Ill. — Deere & Co. officials declined to participate in *Pensions & Investment Age's* 1987 survey of the top 200 pension funds. Because of the varying dates of information available from the 1988 Money Market Directory, a meaningful comparison of 1987 and 1986 assets was not possible.

**Equity managers:** Batterymarch; J.P. Morgan; Wright.

**Fixed-income managers:** Brown Brothers Harriman; J.P. Morgan.

**Real estate managers:** J.P. Morgan.

The master trustee of the defined benefit plans is Boston Safe Deposit; custodian and investment manager of the defined contribution plans is State Street Bank. No investment consultant is used.

Key personnel overseeing the investment management of the fund are Carl Liebscher, director-investments, and S.M. Syverud, manager-investment analysis.

## Delta Air Lines Inc.

| | ($ millions) |
|---|---|
| Total assets | 3,150 |
| Defined benefit | 2,750 |
| Thrift or savings | 400 |
| In-house assets: | |
| Equities | 110 |
| Fixed income | 190 |
| Passive investments: | |
| Indexed stocks | 70 |
| GICs | 30 |
| Alternative investments: | |
| International equities | 220 |
| Venture capital | 20 |
| LBOs | 50 |
| Mortgage-backed securities | 50 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 57.2% |
| Bonds | 25% |
| Cash equivalents | 15% |
| Mortgage-backed securities | 1.8% |
| GICs | 1% |

ATLANTA — Total employee benefit assets at Delta Air Lines Inc. increased 23.5% to $3.15 billion from $2.55 billion in the year ended Sept. 30. Pension fund assets increased 25% to $2.75 billion from $2.2 billion for the same period.

James B. Taylor, assistant vice president-investment management, did not have asset figures as of Oct. 30.

Although he would not identify the fund's managers, *Pensions & Investment Age* reported Nov. 2 the fund invested $50 million in Forstmann Little & Co.'s Buyout Partnership-IV. According to the 1986 Money Market Directory, the fund managers also include Harris Bank, Travelers and Vanguard.

The master trustee is Harris Trust.

Key personnel overseeing the investment management of the fund are Mr. Taylor and James G. Mathews, manager-investment management.

## Detroit Retirement Systems

| | ($ millions) |
|---|---|
| Total assets* | 2,948 |
| Defined benefit assets | 2,520 |
| Defined contribution | 428 |
| Employer contributions | 165 |
| Benefit payments | 180 |
| *Book value as of June 30, 1987 | |
| In-house assets: | |
| Short term | 50 |
| Passive investments: | |
| Indexed stocks | 45 |
| Indexed bonds | 10 |
| GICs | 410 |
| Alternative investments: | |
| International equities | 15 |
| International bonds | 7 |
| Venture capital | 52 |
| Private placements | 343 |
| Real estate equity | 53 |
| Mortgages | 375 |
| Mortgage-backed securities | 133 |
| Asset mix: | |
| Stocks | 26% |
| Bonds | 22% |
| Cash equivalents | 9% |
| Real estate equity | 3% |
| Mortgages | 11% |
| Mortgage-backed securities | 5% |
| GICs | 13% |
| Other | 11% |

DETROIT — The book value of the total employee benefit assets of the Detroit Retirement Systems, composed of the General Retirement System and the Police & Fire Retirement System, was $2.948 billion as of June 30, an increase of 7.5% from $2.742 billion a year earlier.

**Equity managers:** Ariel; Bankers Trust (index fund); Citicorp (foreign equities); Comerica; Feldsman; Manufacturers National (index fund); and Marquette.

**Fixed-income managers:** First Federal Savings (short term) and Manufacturers National (index fund).

**Balanced managers:** Boston Co.; Harbor; Loomis, Sayles; Munder; Oppenheimer; Putnam; and Scudder, Stevens & Clark.

**Real estate managers:** Mellon Real Estate and Mortgage Investors.

The master custodian for the general system is Comerica; the police and fire system uses Manufacturers National. The investment consultant for the general system is Prudential-Bache; the police and fire system uses SEI.

Key personnel overseeing the investment management of the funds are Fred Murphy, executive secretary, and Nicholas Degei, administrative assistant.

## Digital Equipment Corp.

| | ($ millions) |
|---|---|
| Total assets | 1,322 |
| Defined benefit assets | 1,201 |
| Thrift or savings/401(k) | 121 |
| Employer contributions | na |
| Benefit payments | 6 |
| In-house assets: | |
| Equities | 435 |
| Passive investments: | |
| Indexed stocks | 257 |
| Indexed bonds | 90 |
| Alternative investments: | |
| Venture capital | 7 |
| Real estate equity | 157 |
| Hedging devices: | |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 67.5% |
| Bonds | 16% |
| Cash equivalents | 2% |
| Real estate equity | 14% |
| Venture capital | 0.5% |

ACTON, Mass. — Digital Equipment Corp.'s employee benefit assets rose 42% in the year ended Sept. 30 to $1.32 billion from $928 million.

**Equity managers:** Alliance Capital; Bankers Trust; and Capital Guardian.

**Fixed-income managers:** Bankers Trust and Jennison.

**Real estate manager:** Aldrich, Eastman & Waltch.

The master trustee is Boston Safe Deposit.

The key person overseeing the investment management of the fund is A. Raymond Schmalz, manager-U.S. pension fund.

## Dow Chemical Co.

| | ($ millions) |
|---|---|
| Total assets | 2,890 |
| Defined benefit | 2,340 |
| 401(k) | 550 |
| Employer contributions | 165 |
| Benefit payments | 160 |
| In-house assets: | |
| Equities | 465 |
| Fixed income | 150 |
| Passive investments: | |
| Indexed stocks | 350 |
| GICs | 50 |
| Alternative investments: | |
| International equities | 175 |
| Venture capital | 30 |
| Real estate equity | 70 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 63% |
| Bonds | 19% |
| Cash equivalents | 14% |
| Real estate equity | 2% |
| GICs | 2% |

MIDLAND, Mich. — Dow Chemical Co.'s total employee benefit assets grew 39% to $2.89 billion as of Sept. 30 from $2.08 billion the previous year; defined benefit assets grew 32% to $2.34 billion from $1.77 billion. Fund officials would not release Oct. 31 figures.

**Equity managers:** Alliance; Bankers Trust; Capital Guardian; J.P. Morgan; Provident Capital; Schroder Capital Management; State Street Research; and Wellington Trust.

**Fixed-income manager:** J.P. Morgan.

**Real estate managers:** Acquest; Aldrich, Eastman & Waltch; Coldwell Banker; Lehndorff & Babson; and TCW Realty.

The master trustee is National Bank of Detroit.

Key personnel overseeing the investment management of the fund are Robert McFedries, director-portfolio investment; W. Jerry Burroughs, senior portfolio manager; and Richard Cross, portfolio manager.

## E.I. du Pont de Nemours & Co. Inc.

| | ($ millions) |
|---|---|
| Total assets | 16,868 |
| Defined benefit | 12,300 |
| Thrift or savings | 3,728 |
| 401(k) | 431 |
| TRASOP/ESOP | 409 |
| Employer contributions | 99 |
| Benefit payments | 679 |
| Portfolio insurance | 138 |
| In-house assets: | |
| Equities | 6,561 |
| Fixed income | 3,838 |
| Short term | 1,220 |
| Other | 27 |
| Passive investments: | |
| Indexed stocks | 2,057 |
| GICs | 13 |
| Alternative investments: | |
| International equities | 429 |
| International bonds | 738 |
| Venture capital | 45 |
| Private placements | 13 |
| Real estate equity | 58 |
| Mortgage-backed securities | 884 |
| Hedging devices: | |
| Stock options | Y |
| Bond options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 37% |
| Bonds | 25% |
| Cash equivalents | 19% |
| Mortgage-backed securities | 8% |

WILMINGTON, Del. — The E.I. du Pont de Nemours & Co. total benefit assets include the funds for Conoco, which du Pont took over several years ago but just placed under the same management as du Pont's fund. Total benefit assets increased 15.9% to $16.459 billion from $14.205 billion for the 12 months ended Sept. 30. As of Oct. 31, total assets were $15.133 billion, reflecting the market crash and the company's movement of $1 billion out of equities during September. The percentage in stocks was down and the portion in bonds was up as a result of market conditions.

**Equity managers:** Fred Alger; Batterymarch; GAMCO; Helman Jordan; J.P.Morgan; Rogers Casey Barksdale.

**Fixed-income managers:** John Hancock; Solomon Asset.

**Real estate managers:** First RepublicBank, Hancock, J.P. Morgan.

The primary master custodian is Wilmington Trust.

Key personnel overseeing the investment management of the fund are Keith E. Tucker, vice president; Edward J. Bassett, director of equity investments; and Lawrence R. Starrall, director of fixed-income investments.

# E

## Eastern Airlines Inc.

| | ($ millions) |
|---|---|
| Total assets* | 2,565 |
| Defined benefit | 1,500 |
| Defined contribution | 1,065 |
| Employer contributions | na |
| Benefit payments | na |
| *P&I Age estimate | |
| Alternative investments: | |
| Oil and gas | 10 |
| Asset mix: | |
| Stocks | 60% |
| Bonds | 10% |
| Real estate equity | 23% |
| Other | 7% |

BOSTON — Assets in the Eastern Air Lines Variable Benefit Retirement Plan for Pilots grew 21.9% to $1.065 billion as of Sept. 30 from the $874 million reported a year earlier. Data for Eastern's defined benefit plans were not available.

As of Sept. 30, managers for the pilots variable-benefit plan were:

**Equity managers:** Amoskeag National Bank; Atlantic Century; Brandywine; Campbell Advisors; Capital Guardian; Cramer Rosenthal & McGlynn; Hawthorne; National Investment Services; Thorndike, Doran; Waite & Correnti.

**Fixed-income managers:** Capital Guardian; Hawthorne.

**Real estate managers:** Hawthorne; NCNB; Trinity Advisors.

The custodian is State Street Bank; NCNB provides custodial services for real estate assets.

Key personnel overseeing the investment management of the fund are Charles G. Dyer, director; and Polly V. Fawcett and N. Allen Taylor, associates.

## Eastman Kodak Co.

| | ($ millions) |
|---|---|
| Total assets* | 8,264 |
| Defined benefit | 6,643 |
| 401(k) | 1,621 |
| Employer contributions | na |
| Benefit payments | na |
| *P&I Age estimate | |
| Alternative investments: | |
| Real estate equity | 400 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 67% |
| Bonds | 1% |
| Cash equivalents | 4% |
| Real estate equity | 6% |
| Annuities | 19% |
| Other | 3% |

ROCHESTER, N.Y. — *Pensions & Investment Age* estimates total employee benefit assets at Eastman Kodak Co. rose 24.6% to $8.264 billion from $6.631 billion during the 12-month period ended Sept. 30, 1987. During the same period, it is estimated defined benefit assets increased 25% to $6.643 billion from $5.309 billion.

Managers as of Jan. 1 were:

**Equity managers:** American National Bank; Analytic; Baker, Nye; Sanford C. Bernstein; Boston Safe; Brignoli, Curley & Roberts; Fidelity Management Trust; McKenzie Walker; J.P. Morgan; Neuberger & Berman; T. Rowe Price; PRIMECAP; Rogers, Casey & Barksdale; Rosenberg Institutional; TCW; Value Line; and Waddell & Reed.

(Global): Rogers, Casey & Barksdale and Templeton.

**Real estate managers:** Aetna; Equitable; Goldman, Sachs; JMB; Lehndorff & Babson; National Life Insurance; PSI Institutional; and RREEF.

**Annuity manager:** Metropolitan Life.

**Oil & gas managers:** Chase Investors and J.P. Morgan.

**Capital growth manager:** John Hancock.

The master trustee is Boston Safe Deposit.

Key personnel overseeing the investment management of the fund are Russell L. Olson, director-pension investments, and A. Duff Lewis Jr., pension investment coordinator.

## Church Pension Fund (Episcopal)

| | ($ millions) |
|---|---|
| Total assets | 1,488 |
| Defined contribution | 1,488 |
| Employer contributions | 45 |
| Benefit payments | 36 |
| Portfolio insurance | 900 |
| In-house assets: | |
| Equities | 50 |
| Short term | 50 |
| Alternative investments: | |
| International equities | 40 |
| Real estate equity | 1 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 59% |
| Bonds | 35% |
| Cash equivalents | 5% |
| Real estate equity | 1% |

NEW YORK — The Episcopal Church Pension Fund's total employee benefit assets increased about 19% to $1.488 billion from $1.25 billion for the year ended Sept. 30.

The assets fell 4.6% to $1.42 billion for the period Sept. 30 to Oct. 31, according to Robert A. Robinson, president of the fund. He attributed the relatively mild loss to the fund's dynamic hedging program.

**Equity managers**: (domestic) Alliance and J.P. Morgan. (International) J.P. Morgan.

**Fixed-income manager:** J.P. Morgan.

**Real estate manager:** J.P. Morgan.

The master trustee is J.P. Morgan.

Key personnel overseeing the investment management of the fund are Mr. Robinson; Walter F. Donnelly, executive vice president; and Frank I. Squeri, senior vice president.

## Exxon Corp.

| | ($ millions) |
|---|---|
| Total assets | 8,505 |
| Defined benefit | 3,965 |
| Thrift or savings/401(k) | 3,933 |
| ESOP | 607 |
| Employer contributions | 103 |
| Benefit payments | 400 |
| In-house assets: | |
| Equities | 1,387 |
| Fixed income | 199 |
| Short term | 53 |
| Passive investments: | |
| Indexed stocks | 2,128 |
| Indexed bonds | 377 |
| Alternative investments: | |
| International equities | 341 |
| Venture capital | 55 |
| Oil and gas | 29 |
| Real estate equity | 427 |
| Mortgage-backed securities | 132 |
| Hedging devices: | |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 66% |
| Bonds | 10% |
| Cash equivalents | 1% |
| Real estate equity | 11% |
| Mortgage-backed securities | 3% |
| Annuities | 8% |
| Oil and gas | 1% |

NEW YORK — Exxon Corp.'s total employee benefit assets during the 12 months ended Sept. 30 increased 12.6% to $8.505 billion from $7.55 billion. Defined benefit assets rose 7% during the same period, to $3.965 billion from $3.702 billion.

Pension officials would not divulge how the fund fared during the market crash.

**Equity managers:** Sanford C. Bernstein; Citibank; Fidelity; Morgan Grenfell; State Street Bank; Trinity; and Wells Fargo.

**Fixed-income managers:** Chase Investors; Lehman Asset; and State Street Research.

**Real estate managers:** Aetna; Corporate Property Investors; Equitable; First Republicbank; and Prudential.

**Insured reserves managers:** Aetna; Equitable; Hancock; Prudential; and Travelers.

**Royalties managers:** First City National Bank and Louisiana National Bank.

The master trustee is Irving Trust.

Key personnel overseeing the investment management of the fund are W. Allen Harrison, assistant treasurer; James E. Bayne, manager-trust and benefits finance; and Margie M. Wang, senior financial analyst.

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*Pensions & Investment Age* will highlight alternative investments in the May 30 issue.

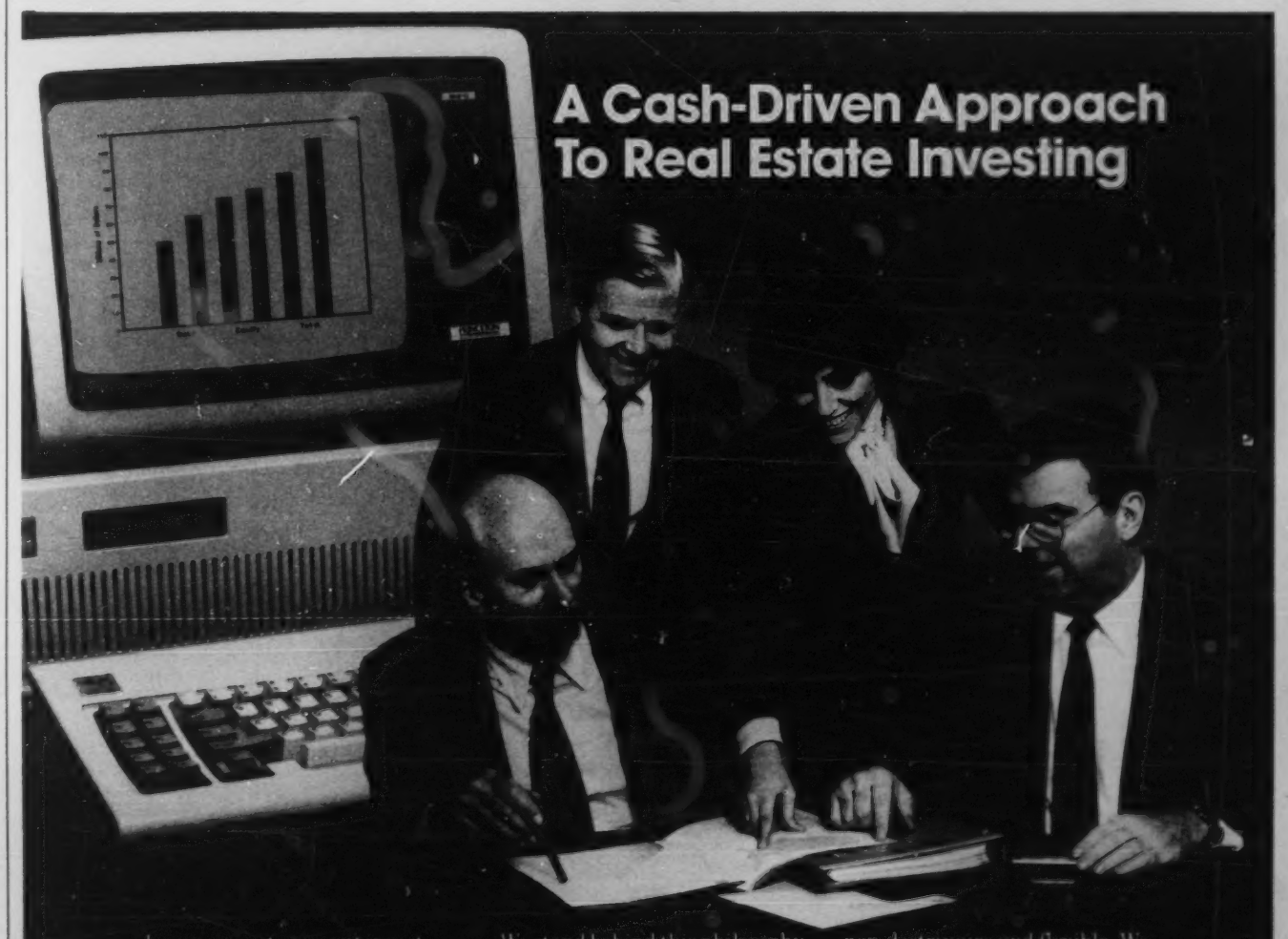
# F

## Florida Power & Light Co.

| | ($ millions) |
|---|---|
| Total assets | 1,746 |
| Defined benefit | 1,212 |
| Defined contribution | 175 |
| Thrift or savings | 359 |
| Passive investments: | |
| Indexed stocks | 192 |
| Indexed bonds | 141 |
| Alternative investments: | |
| International equities | 147 |
| Real estate equity | 34 |
| Asset mix: | |
| Stocks | 70% |
| Bonds | 19% |
| Cash equivalents | 2% |
| Real estate equity | 3% |

MIAMI — Assets of the Florida Power & Light Co. increased 15.7% in the year ended Sept. 30, to $1.746 billion from $1.509 billion. The defined benefit assets increased by the same amount, to $1.212 billion from $1.047 billion during the same period. The company would not release its asset size as of Oct. 31.

**Equity managers:** General American Investors; J.P. Morgan; Roanoke; Rogers, Casey & Barksdale; Fayez Sarofim; Donald Smith; and Wells Fargo Investment.

**Fixed-income managers:** Wells Fargo Investment and Western Asset.

**Real estate managers:** JMB; McMahan; and RREEF.

The master trustee is Wachovia Bank & Trust; the investment consultant is Rogers, Casey & Barksdale.

Key personnel overseeing the investment management of the fund are E.L. Hoffman, director of finance and treasurer, and R.A. Kaminsky, coordinator of investment funds.

## Florida State Board of Administration

| | ($ millions) |
|---|---|
| Total assets* | 13,700 |
| Defined benefit | 13,700 |
| Employer contributions | 696 |
| Benefit payments | 529 |
| *as of June 30, 1987 | |
| In-house assets: | |
| Equities | 2,949 |
| Fixed income | 4,257 |
| Short term | 175 |
| Other | 84 |
| Passive investments: | |
| Indexed stocks | 4,301 |
| Alternative investments: | |
| Private placements | 255 |
| Real estate equity | 550 |
| Mortgage-backed securities | 1,455 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 52% |
| Bonds | 29.9% |
| Cash equivalents | 3.8% |
| Real estate equity | 3.7% |
| Mortgage-backed securities | 10.6% |

TALLAHASSEE, Fla. — The assets of the Florida State Board of Administration totaled $13.7 billion as of June 30, an increase of 18.6% from the $11.544 billion reported Sept. 30, 1986.

**Equity managers:** Fred Alger; Alliance; Ariel; Barnett Bank; Barrow, Hanley, Mewhinney & Strauss; Bear Stearns; Delaware Investment; Denver; Eagle; IDS; INVESCO; Lazard Freres; Prudential; Stein, Roe & Farnham; Wells Fargo; and Westwood.

**Fixed-income manager:** Alliance.

**Real estate managers:** Aetna; Equitable; First Chicago; Goldman, Sachs; Hancock; LaSalle; and Prudential.

The master custodian is Citicorp; the investment consultant is SEI.

Key personnel overseeing the investment management of the fund are Fred E. Loopman, acting executive director, and Jack Madden, deputy executive director-administration.

## Ford Motor Co.

| | ($ millions) |
|---|---|
| Total assets | 19,800 |
| Defined benefit | 15,700 |
| Thrift or savings/401(k) | 3,400 |
| TRASOP | 700 |
| Employer contributions | 900 |
| Benefit payments | 850 |
| In-house assets: | |
| Fixed income | 1,000 |
| Alternative investments: | |
| Venture capital | 50 |
| Oil and gas | 15 |
| Hedging devices: | |
| Stock options | Y |
| Bond options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 60% |
| Bonds | 25% |
| Cash | 10% |
| Real estate equity | 5% |

DEARBORN, Mich. — Ford Motor Co. had total employee benefit assets of $19.8 billion as of Sept. 30, an increase of 35.6% from $14.6 billion the previous year. Defined benefit assets totaled $15.7 billion as of Sept. 30, up 28.7% from $12.2 billion a year earlier.

Defined benefit assets dropped 15.29% to $13.3 billion as of Nov. 1. Ford officials declined to comment on any planned changes in the fund's asset mix.

**Equity managers:** Alliance; Ariel; Sanford C. Bernstein; Capital Guardian; Chase Investors; Concord; Dewey Square; Dreman; Fidelity; First RepublicBank; Manufacturers Bank; Mitchell Hutchins; J.P. Morgan; PRIMECAP; Sarofim; Siebel; and State Street Research.

**Fixed-income managers:** Capital Guardian; Dewey Square; J.P. Morgan; T. Rowe Price; Sarofim; and State Street Research.

**Real estate managers:** Aetna; Bank of Boston; CIGNA; LaSalle; J.P. Morgan; NCNB; Public Storage; and Security Capital.

The master trustee is Manufacturers National Bank of Detroit.

Key personnel overseeing the investment management of the fund are M.E. Maertens, manager-trust investments, and P.E. Sharp, assistant treasurer.

*The Creation of Extraordinary Value is the Result of Extraordinary Vision*

- - the Rembrandt Philosophy

*A* profitable investment portfolio, like the great artist's work on canvas, is rarely the consequence of whim or chance. At Tomlin Properties, we have that extraordinary vision to create extraordinary value with exceptional returns through 17 years of investing in Predevelopment Land.

***"Heaven forbid that I should ever see things the way they do!"***

Rembrandt worked to see what few around him saw. And he created masterpieces. At Tomlin Properties, we've cultivated an approach that looks beyond what "conventional wisdom" might suggest. While some view land as risky business, we've created an approach that proves this is a bit short sighted. With over eighty investments in predevelopment land, *we've proven that predevelopment land is a prudent investment.*

***"Secret . . . fiddlesticks! I start with a formula, and work to prove that it is correct."***

Don't misunderstand. When we speak of "vision" we're not referring to some nebulous "feeling" we get about a parcel of land. The Tomlin formula is based on *detailed research, intensive management* and *hard work*. That experience has been the cornerstone of our success. With a keen eye on the nation's prime growth markets, we begin with the parameters of a cautious investment clearly in focus: location of the land, and timing of the acquisition. Assessed correctly, these are the factors which *minimize risk* and maximize return. Additionally, we only invest in those cities where we have *on-site local management* offices: *Dallas, Los Angeles, Houston, Atlanta, Phoenix and Washington, D.C.* Local Tomlin executives who know the market and who know how to maximize each property's potential. Time and time again our clients have enjoyed the fruits of this approach.

***"Perhaps 400 years from now, if any of my pictures are left, they will say, 'this fellow was going in the right direction'."***

Rembrandt knew that time was the ultimate test of the value of his art. Fortunately we're not looking at a 400 year waiting period. Instead, our average investment period is much shorter than you might expect. History tells us that land has been profitable for the patient sophisticated investor. And while not all land is suitable for capital growth investments, we live in a world where predevelopment land in ideal locations is a diminishing resource. Its appreciation potential is great, while the measured risks are comparable to the most traditionally conservative portfolio components. And Tomlin Investments in predevelopment land continually outperform other forms of real estate, stocks, bonds, and treasury bills. *Our clients agree — we've passed the test of time. And the result is extraordinary value.*

TOMLIN PROPERTIES, INC.
George M. Dishman, Partner
214/239-8041
5001 Spring Valley Rd., Ste. 1000E, LB10
Dallas, Texas 75244
Tlx. 735085 TOMPROP VD Fax. 7029786


## G

## GenCorp Inc.

| | ($ millions) |
|---|---|
| Total assets | 1,777 |
| Defined benefit | 1,396 |
| Thrift or savings/401(k) | 345 |
| ESOP | 36 |
| Benefit payments | 80 |
| In-house assets | 922 |

FAIRLAWN, Ohio — The total employee benefit assets of GenCorp Inc. increased 16.5% to $1.777 billion from $1.525 billion in the year ended Sept. 30. Defined benefit assets during that period grew 15% to $1.396 billion from $1.214 billion.

The total asset value dropped 8.9% to $1.619 billion as of Oct. 31, according to Richard A. Nelson, assistant to the chairman of investment boards, while defined benefit assets decreased 8.2% to $1.281 billion.

**Equity managers:** J.P. Morgan; Round Hill; and Wilkens & Nanovic.

**Fixed-income managers:** J.P. Morgan; Round Hill; Wilkens & Nanovic.

**Real estate managers:** Landauer and RREEF.

The master custodians are First National Bank of Ohio and Bank of America.

Key personnel overseeing the investment management of the fund are John O'Neil, chairman-investment board; Robert M. Smith, vice chairman-investment boards; and Phyllis M. Chelovitz, member-investment boards.

## General Dynamics Corp.

| | ($ millions) |
|---|---|
| Total assets | 4,800 |
| Defined benefit | 3,200 |
| Defined contribution | 1,600 |
| Employer contributions | 150 |
| Benefit payments | 100 |
| In-house assets: | |
| Equities | 200 |
| Fixed income | 1,500 |
| Other | 150 |
| Passive investments: | |
| Indexed stocks | 150 |
| Indexed bonds | 210 |
| GICs | 150 |
| Alternative investments: | |
| Mortgage-backed securities | 50 |
| Asset mix: | |
| Stocks | 45% |
| Bonds | 50% |
| GICs | 5% |

ST.LOUIS — General Dynamics Corp.'s total benefit assets and pension assets grew 23% to $4.8 billion as of Sept. 30 from $3.9 billion the previous year. Defined benefit assets grew 28% to $3.2 billion from $2.5 billion.

Statistics on how the fund fared during October were not available.

**Equity managers:** Alliance; Anderson, Hoagland; Ardsley Partners; Breen; Campbell Advisors; Delaware Investment; First Manhattan; Jennison Associates; Lazard Freres; Miller, Anderson & Sherrerd; J.P. Morgan; Rosenberg Institutional Equity; Sasco Capital; Sit Investment, TCW Asset Management; Trinity; and Wells Fargo.

**Fixed-income managers:** Bank IV; Centerre Trust; and Discount Advisers; and Mercantile Trust.

**GIC managers:** Aetna; Equitable; Hancock; Mutual Benefit; and Travelers.

The master trustee is Chase Manhattan Bank.

Key personnel overseeing the investment management of the fund are Charles D. Walbrandt, staff vice president-trust investment operation; and Rebecca J. Roesch, manager-trust investment operation.

## General Electric Co.

| | ($ millions) |
|---|---|
| Total assets | 27,300 |
| Defined benefit | 22,100 |
| Thrift or savings/401(k) | 4,700 |
| ESOPs | 500 |
| In-house assets: | |
| Equities | 9,100 |
| Fixed income | 5,200 |
| Short term | 2,600 |
| Other | 3,400 |
| Passive investments: | |
| Indexed stocks | 3,700 |
| Dedicated/immunized | 1,700 |
| GICs | 600 |
| Alternative investments: | |
| International equities | 1,300 |
| International bonds | 500 |
| Other international | 100 |
| Private placement/venture capital | 1,400 |
| LBOs | 600 |
| Real estate | 2,000 |
| Hedging devices: | |
| Stock options | Y |
| Bond options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 45% |
| Bonds | 25% |
| Cash equivalents | 15% |
| Other | 15% |

STAMFORD, Conn. — General Electric Co.'s total employee benefit assets and pension assets grew 19.3% to $27.3 billion as of Sept. 30 from $22.891 billion the previous year. Defined benefit assets rose 17.5%, to $22.1 billion from $18.801 billion from the previous year.

Total assets after the market drop of October were $24.8 billion, a drop of 9%.

Ninety-two percent of total pension assets are managed internally by GE Investment Corp., an investment management affiliate owned by GE Co. GE uses outside managers in selected areas but declines to identify them.

Master custodian of the GE plan is Chase Manhattan; master trustee of the RCA plan is Bankers Trust.

Key personnel overseeing the investment management of the fund are D.F. Frey, vice president and treasurer of GE Co. and president of GEIC; A.S. Bahr, executive vice president-equity investments; and J.H. Myers, executive vice president-fixed income and corporate investments.

## General Foods Corp.

| | ($ millions) |
|---|---|
| Total assets | 2,676 |
| Defined benefit | 2,263 |
| Thrift or savings | 413 |
| Employer contributions | 15 |
| Benefit payments | 75 |
| Passive investments: | |
| Indexed stocks | 543 |
| GICs | 239 |
| Alternative investments: | |
| International equities | 82 |
| Venture capital | 30 |
| Real estate equity | 70 |
| Mortgage-backed securities | 6 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 63.3% |
| Bonds | 10% |
| Cash equivalents | 10.8% |
| Real estate equity | 3.1% |
| Mortgage-backed securities | 2% |
| GICs | 10.8% |

WHITE PLAINS, N.Y. — The General Foods plan grew 7% during the year ended Sept. 30, to $2.676 billion from $2.5 billion. The defined benefit assets grew 13% in the same period, to $2.263 billion from $2 billion. But after the crash, those gains were lost as the defined benefit plan decreased by 14%.

The equity portion of the portfolio was reduced by 5% as a result of the crash, and the difference was made up in bonds, cash, GICs and real estate.

**Equity managers:** Alliance; Bankers Trust; Batterymarch; BEA; Chase Investors; Citibank; First Wisconsin; Jennison Associates; Thorndike, Doran, Paine & Lewis; and Trinity Investment.

**Fixed-income managers:** Aetna; Bankers Trust; Metropolitan Life; J.P. Morgan; PIMCO; and Prudential.

**Real estate managers:** JMB; J.P. Morgan; TCW; and New Court Properties.

**International managers:** J.P. Morgan and N.M. Rothschild.

**Venture capital managers:** DLJ; John Hancock; and Consumer Ventures.

The master trustee is Northern Trust; the investment consultant is Evaluation Associates.

Key personnel overseeing the investment management of the fund are Roger Hostetler, assistant treasurer-benefit funds and John L. Hilty, manager-benefit fund analysis.

## General Motors Corp.

| | ($ millions) |
|---|---|
| Total assets | 40,000 |
| Defined benefit | 34,900 |
| Thrift or savings | 4,900 |
| Other | 200 |
| Employer contributions | na |
| Benefit payments | na |

NEW YORK — General Motors Corp. had $40 billion in total employee benefit assets as of Sept. 30, an increase of 21.6% from $32.9 billion the previous year. Defined benefit assets increased 21.6% to $34.9 billion from $28.7 billion a year earlier.

**Managers:** ABD International; Aetna Life; Aldrich Eastman & Waltch; American National Bank; AmeriTrust; Bank of America; Bankers Trust; Baring America; Baring International; Barrow, Hanley, Mewhinney & Strauss; Batterymarch; BEA; Beekman; Boston Co. Energy; Boston Co. Real Estate; Capital Guardian; Chase Manhattan; Citibank; Daiwa International; Delaware Investment; Dimensional Fund; Fidelity International; Fidelity Management; First National Bank of Boston; First National Bank of Chicago; Franklin Portfolio; Frontier; G.T. Capital; Harris Trust; Hill Samuel; W.R. Huff; InterFirst Bank of Dallas; INVESCO; Jennison; Kleinwort Benson International; Landauer; Lazard Freres; Lehman Management; Lincoln Capital; MacKay-Shields; Magten; Mellon Bank; Merrill Lynch; Metropolitan Life; Morgan Grenfell; Morgan Guaranty Trust; Morgan Stanley Asset; National Bank of Detroit; Nomura Capital; Provident Investment Counsel; Prudential; Rowe Price-Fleming; N.M. Rothschild; Schroder Capital; Solomon Asset; TCW Asset; United Capital; Value Line; Weiss, Peck & Greer; and Wells Fargo.

The master trustees are Bankers Trust, Mellon and Chase Manhattan.

Key personnel overseeing the investment management of the fund are W. Gordon Binns Jr., vice president and chief investment officer; and R. Charles Tschampion, director-investment manager relations.

## Employees' Retirement System of Georgia

| | ($ millions) |
|---|---|
| Total assets | 2,770 |
| Defined benefit | 2,770 |
| Employer contributions | 168 |
| Benefit payments | 105 |
| In-house assets: | |
| Equities | 1,258 |
| Fixed income | 1,351 |
| Short term | 159 |
| Other | 2 |
| Passive investments: | |
| Indexed stocks | 141 |
| Alternative investments: | |
| Real estate equity | 2 |
| Mortgages | 8 |
| Asset mix: | |
| Stocks | 44.5% |
| Bonds | 49% |
| Cash equivalents | 6% |
| Real estate equity | 0.1% |
| Mortgages | 0.4% |

ATLANTA — The Employees' Retirement System of Georgia reported an increase in assets of 19.7% as of Sept. 30, to $2.77 billion from $2.315 billion the previous year. Because of the market drop, however, assets declined 7% to $2.578 billion as of Oct. 31. As of Oct. 31, the fund's stock and bond allocations had shifted to 36.5% and 57% respectively.

**Equity advisers:** First Wachovia; INVESCO; and Thorndike, Doran, Paine & Lewis.

The master trustee is First Wachovia.

Key personnel overseeing the investment management of the fund are Abe Domain, director, and Graham R. Lynch, director-investment services division.

## Teachers Retirement System of Georgia

| | ($ millions) |
|---|---|
| Total assets | 7,080 |
| Defined benefit | 7,080 |
| Employer contributions | 390 |
| Benefit payments | 260 |
| In-house assets: | |
| Equities | 3,306 |
| Fixed income | 3,405 |
| Short term | 367 |
| Other | 2 |
| Passive investments: | |
| Indexed stocks | 356 |
| Alternative investments: | |
| Private placements | 167 |
| Real estate equity | 2 |
| Mortgages | 25 |
| Asset mix: | |
| Stocks | 47% |
| Bonds | 48% |
| Cash equivalents | 5% |

ATLANTA — Total assets of the Teachers Retirement System of Georgia increased 16.7% for the 12 months ended Sept. 30 to $7.08 billion from $6.067 billion.

Because of market volatility during October, the assets dropped 7% to $6.56 billion as of Oct. 31; the stock allocation dropped to 41% and the bond allocation rose to 54%.

**Equity advisers:** Atlanta Capital; C&S Investment; INVESCO; Trusco; Thorndike, Doran, Paine & Lewis; and Wall, Patterson, Hamilton & Allen.

The master trustee is C&S Trust & Investment Management.

Key personnel overseeing the investment management of the fund are Gerald S. Gilbert, executive secretary-treasurer; Graham R. Lynch, director-investment service division; and C.W. Cary, assistant director-investment service division.

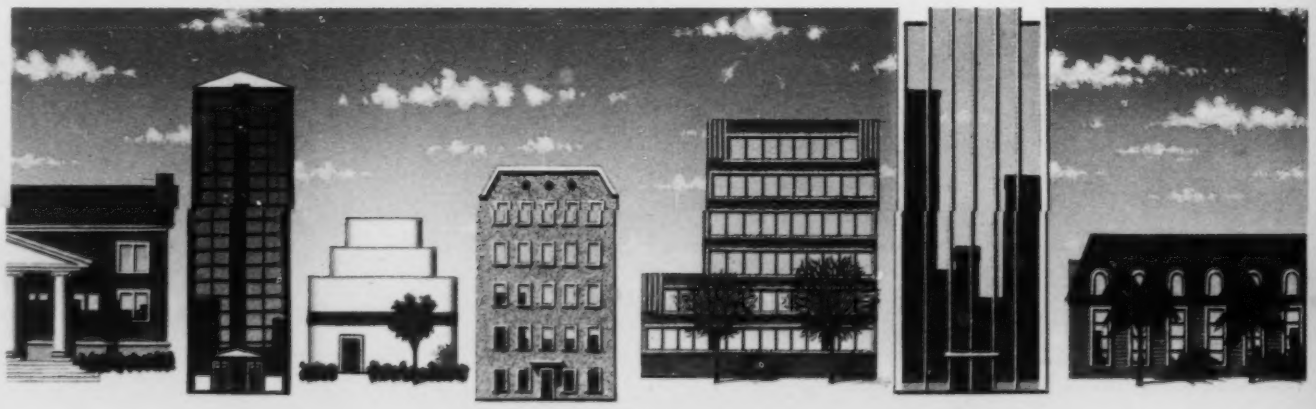
## The Goodyear Tire & Rubber Co.

| | ($ millions) |
|---|---|
| Total assets | 1,783 |
| Defined benefit | 1,527 |
| 401(k) | 195 |
| SESOP | 61 |
| Employer contributions | 13 |
| Benefit payments | 109 |
| Passive investments: | |
| Indexed stocks | 113 |
| Alternative investments: | |
| International bonds | 11 |
| Private placements | 152 |
| Real estate equity | 59 |
| Mortgages | 41 |
| Hedging devices: | |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 36.5% |
| Bonds | 23% |
| Cash equivalents | 28.5% |
| Real estate equity | 3.7% |
| Mortgages | 2.7% |
| Annuities | 5.6% |

AKRON, Ohio — Goodyear Tire & Rubber Co. had $1.783 billion in employee benefit assets as of Sept. 30, an increase of 7.5% from $1.658 billion a year earlier. The company's defined benefit assets totaled $1.527 billion as of Sept. 30, up 2.7% from $1.487 billion the previous year.

Asset totals as of Nov. 1 were not available. No changes in the fund's asset mix were made or were anticipated, according to a company official.

**Equity managers:** Bankers Trust;

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Concord; Dillon, Read; National City; Nicholas; Pilgrim, Baxter, Greig; Prudential Asset; State Street Research; Trust Co. of the West; and United Capital.

**Fixed-income managers:** Desai Capital; Equitable Life; Metropolitan; J.P. Morgan; Prudential Asset; and Travelers.

**Real estate managers:** J.P. Morgan and Prudential Asset.

The master custodian is Northern Trust; the investment consultant is Wilshire.

Key personnel overseeing the investment management of the fund are Oren G. Shaffer, group executive vice president; George R. Hargreaves, vice president and treasurer; and Duane H. Smith, manager-benefit controls and investments.

## Grumman Corp.

| | ($ millions) |
|---|---|
| Total assets | 2,800 |
| Defined benefit | 1,950 |
| Thrift or savings | 850 |
| Employer contributions | 55 |
| Benefit payments | 85 |
| In-house assets: | |
| Equities | 800 |
| Fixed income | 650 |
| Short term | 400 |
| Alternative investments: | |
| Venture capital | 20 |
| LBOs | 10 |
| Real estate equity | 90 |
| Mortgage-backed securities | 100 |
| Asset mix: | |
| Stocks | 40% |
| Bonds | 30% |
| Cash equivalents | 20% |
| Real estate equity | 5% |
| Mortgage-backed securities | 5% |

BETHPAGE, N.Y. — Grumman Corp.'s total employee benefit assets grew almost 16.6% during the year ended Sept. 30 to $2.8 billion from $2.4 billion. Defined benefit assets grew 15.8% to $1.95 billion from $1.684 billion during the same period.

Because of the October stock market crash, defined benefit assets fell 7.7% to $1.8 billion as of Oct. 31.

**Equity manager:** First Manhattan.

**Fixed-income manager:** Fiduciary Trust.

**Real estate managers:** Equitable; CIGNA; and Prudential.

The master trustee is Bank of New York.

William R. Parmentier, assistant treasurer and investment manager, oversees plan investments.

## GTE Corp.

| | ($ millions) |
|---|---|
| Total assets | 11,065 |
| Defined benefit | 9,668 |
| Thrift or savings | 92 |
| 401(k) | 1,305 |
| Employer contributions | 89 |
| Benefit payments | 156 |
| In-house assets: | |
| Equities | 479 |
| Fixed income | 1,435 |
| Passive investments: | |
| Indexed stocks | 1,696 |
| Indexed bonds | 1,433 |
| Alternative investments: | |
| International equities | 1,501 |
| International bonds | 309 |
| Venture capital | 182 |
| Oil and gas | 29 |
| LBOs | 126 |
| Real estate equity | 34 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 66% |
| Bonds | 18% |
| Cash equivalents | 11% |
| Real estate equity | 0.5% |
| Other | 4.5% |

STAMFORD, Conn. — GTE Corp.'s total employee benefit assets grew 23.5% in the year ended Sept. 30, to $11.065 billion from $8.962 billion. Defined benefit assets alone grew 22% to $9.668 billion from $7.924 billion during the period.

But much of those gains were lost during the month of October, when the defined benefit plan dropped 15.2% to $8.2 billion.

The asset mix shifted mostly in favor of bonds and away from cash as a result of the crash, with equity at nearly the same proportion. The bond segment of the portfolio rose to 27% from 18%, while cash decreased to 2% from 11%.

**Equity managers:** Baker, Nye; Bankers Trust; Baring International; Sanford Bernstein; BMI; Cashman, Farrell; Concord Capital; Eagle Management; Fidelity International; First Manhattan; First Pacific Advisors; Franklin Portfolio; Frontier Capital; General American Advisers; Geocapital; Grantham, Mayo, Van Otterloo; GTE Investment; G.T. Capital; Hellman, Jordan; Hotchkis and Wiley; Hutton Capital; Investment Reserves; Johnson, Valliant & Broadfoot; Morgan Grenfell; Morgan Guaranty Trust; Oppenheimer; Pacific Financial Research; Provident Investment; Rosenberg Institutional; Rowe Price-Fleming; Donald Smith; TCW; Weiss Peck & Greer; and Wertheim-Philippe International.

**Fixed-income managers:** Bank of America Investment Management International; Baring America; Beutel, Goodman International; GTE Investment; PIMCO; Security Capital; and Solomon Asset.

**Real estate managers:** Citibank; GTE Investment; Manufacturers National; Morgan Guaranty; and State Street Bank.

**Other managers:** Bankers Trust; Chase Investors; Citibank; Forest Investment; GTE Investment; Investment Reserves; John Hancock Group/Forest; Fayez Sarofim; TCW Debt & Royalty Fund II; TCW.

The master trustee is Bankers Trust.

Key personnel overseeing the investment management of the fund are: John Carroll, president; Pamela McCann, vice president-pension fund management; and Frank Wilkinson, vice president-fixed income investment.

H

## Halliburton Co.

| | ($ millions) |
|---|---|
| Total assets | 2,023 |
| Defined contribution | 2,023 |
| Benefit payments | 188 |
| In-house assets: | |
| GICs | 750 |
| Passive investments: | |
| GICs | 750 |
| Alternative investments: | |
| International equities | 61 |
| International bonds | 7 |
| Real estate equity | 33 |
| Mortgages | 24 |
| Hedging devices: | |
| Bond options | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 34% |
| Bonds | 19% |
| Cash equivalents | 4% |
| Real estate equity | 2% |
| Mortgages | 1% |
| GICs | 37% |
| International | 3% |

DALLAS — Halliburton Co.'s plan assets grew 79% during the year ended Sept. 30, to $2.023 billion from $1.130 billion, mainly because of the absorption of $700 million in plan assets from two Houston-based subsidiaries: Brown & Root Inc. and Highland Insurance Co.

Total assets decreased 7.5% as a result of the October stock market crash, to $1.87 billion as of Oct. 31.

**Equity managers:** INVESCO; Lehman; Fayez Sarofim; and Wentworth Hauser & Violich.

**Fixed-income managers:** INVESCO; Lehman; PIMCO; Fayez Sarofim; and Wentworth Hauser & Violich.

**Real estate managers:** Aetna and Prudential.

**International manager:** Schroder.

The master trustee is First RepublicBank; the investment consultant is SEI.

Nathanial H. Duffield, investment committee chairman, oversees fund investments.

## Employees' Retirement System, State of Hawaii

| | ($ millions) |
|---|---|
| Total assets | 3,400 |
| Defined benefit | 3,400 |
| Employer contributions | 152 |
| Benefit payments | 151 |
| In-house assets: | |
| Equities | 44 |
| Fixed income | 9 |
| Short term | 124 |
| Other | 556 |
| Passive investments: | |
| Indexed stocks | 244 |
| GICs | 121 |
| Alternative investments: | |
| International equities | 477 |
| Real estate equity | 135 |
| Mortgages | 376 |
| Hedging devices: | |
| Asset mix: | |
| Stocks | 33% |
| Bonds | 39% |
| Cash equivalents | 9% |
| Real estate equity | 4% |
| Mortgages | 11% |
| GICs | 4% |

HONOLULU — The Employees' Retirement System, State of Hawaii had $3.4 billion in defined benefit assets as of Sept. 30, an increase of 13% from $3.009 billion the previous year.

**Equity managers:** Alliance; Atalanta/Sosnoff; Barrow, Hanley, Mewhinney and Strauss; Delaware; Hanson; INVESCO; and McCowan.

**Fixed-income managers:** Lehman Management; PIMCO; Sarofim; Scudder, Stevens & Clark; Security Pacific; and Wentworth, Hauser and Violich.

**Real estate managers:** Aetna; CIGNA; and Metropolitan.

**Other managers:** Daiwa International; Mellon Index; Nomura International; and Schroder International.

The master custodian is Irving Trust; the investment consultants are SEI and Callan.

Key personnel overseeing the investment management of the fund are Stanley Siu, secretary, and David Shimabukuro, assistant secretary.

## Hercules Inc.

| | ($ millions) |
|---|---|
| Total assets | 1,603 |
| Defined benefit | 1,336 |
| Defined contribution | 2 |
| 401(k) | 265 |
| Employer contributions | 13 |
| Benefit payments | 64 |
| Passive investments: | |
| Indexed stocks | 12 |
| Indexed bonds | 49 |
| Dedicated/immunized | 236 |
| GICs | 117 |
| Alternative investments: | |
| International equities | 181 |
| Real estate equity | 113 |
| Hedging devices: | |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 60.9% |
| Bonds | 21.4% |
| Cash equivalents | 0.4% |
| Real estate equity | 8.5% |
| GICs | 8.8% |

WILMINGTON, Del. — Hercules Inc.'s total employee benefit assets rose 17.3% in the year ended Sept. 30, to $1.603 billion from $1.367 billion. Defined benefit assets rose 13.8% to $1.336 billion from $1.174 billion.

Because of market volatility during October, total assets fell 9.7% to $1.448 billion and defined benefit assets dropped 10% to $1.198 billion as of Oct. 31. As of the same date, the asset mix had shifted as follows: Bonds rose to 32.8% from 21.4%; stocks fell to 47.4% from 60.9%; cash equivalents stayed at 0.4%; real estate went to 9.5% from 8.5% and GICs went to 9.9% from 8.8%.

**Equity managers:** Capital Guardian; Cooke & Bieler; Fidelity International; General American; Lazard Freres; J.P. Morgan; Marvin & Palmer; Mellon Capital and Warburg.

**Fixed-income manager:** R.C. Brown.

**Real estate managers:** Aetna; Equitable; and Prudential.

**Short-term manager:** Bankers Trust.

**GIC managers:** Aetna; Equitable; New England Life; Travelers; and Union Mutual.

The master trustee is Bankers Trust; the investment consultant is Frank Russell.

The key person overseeing the investment management of the fund is John Long, director-investments.

## Hewlett Packard Co.

| | ($ millions) |
|---|---|
| Total assets* | 1,540 |
| Employer contributions | na |
| Benefit payments | na |

*P&I Age estimate

PALO ALTO, Calif. — Employee benefit assets of Hewlett Packard Co. increased 33.9% to $1.54 billion as of Sept. 30 from $1.15 billion a year earlier, according to a *Pensions & Investment Age* estimate.

Some assets are managed internally, although the company would not reveal the amount. According to the Money Market Directory, the managers are as follows.

**Managers:** Capital Guardian; G.T. Capital; J.P. Morgan; PRIMECAP; Vanguard; and Wells Fargo.

The master trustee is Harris Trust.

Key personnel overseeing the investment management of the fund are Robert E. Greeley, manager-corporate investments, and Elizabeth Obershaw, senior planning and reporting analyst.

## Honeywell Inc.

| | ($ millions) |
|---|---|
| Total assets | 2,299 |
| Defined benefit | 1,877 |
| 401(k) | 422 |
| Employer contributions | 23 |
| Benefit payments | 112 |
| Passive investments: | |
| Indexed stocks | 389 |
| Alternative investments: | |
| International equities | 141 |
| International bonds | 93 |
| Venture capital | 62 |
| Oil and gas | 15 |
| LBOs | 10 |
| Private placements | 213 |
| Real estate equity | 134 |
| Mortgages | 60 |
| Hedging devices: | |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 44.2% |
| Bonds | 21.7% |
| Cash equivalents | 11.4% |
| Real estate equity | 7.2% |
| Other | 15.5% |

MINNEAPOLIS — As of Sept. 30, Honeywell Inc.'s total employee benefit assets increased 6.3% to $2.299 billion from $2.163 billion a year earlier. Defined benefit assets increased 9.9% during the same period, to $1.877 billion from $1.708 billion.

**Equity managers:** Abel/Noser; Alliance; Baring International; Forstmann-Leff; GAMCO; IDS International; Jundt/Capen; Mellon Capital; and TCW Asset.

**Fixed-income manager:** Fischer, Francis, Trees & Watts.

**Real estate managers:** Coldwell Banker; Landauer; McMahan; State Street Bank; and TCW.

**Other managers:** Aetna; Arscott-Norton; Associated Venture; Bridge Capital; Chase Manhattan; Cherokee Resources; Commonwealth Life; Concord Partners; Dougery Jones; First Chicago; First Reserve; Forstmann Little; John Hancock; Investech; Larimer; Morgan Holland; Narragansett; New Court Partners; Northwestern National Life; T. Rowe Price; Prudential Asset; Robertson, Coleman & Stephens; Sprout Growth; T.A. Associates; Travelers; TSA; Ventech; and Welsh Carson Anderson & Stowe.

The master trustee is Chase Manhattan; the investment consultant is Rogers, Casey & Barksdale.

Key personnel overseeing the investment management of the fund are R.T. Mall, vice president-pension fund investments, and D.W. Veverka, manager-long term investments.

## National Pension Fund for Hospital and Health Care Employees

| | ($ millions) |
|---|---|
| Total assets* | 1,797 |
| Defined benefit assets | 1,797 |
| Employer contributions | na |
| Benefit payments | na |

*P&I Age estimate

NEW YORK — Total benefit assets of the National Pension Fund for Hospital and Health Care Employees increased 12.3% in the 15 months ended Sept. 30, to $1.797 billion from $1.6 billion as of June 30, 1986, according to *Pensions & Investment Age* estimates.

**Balanced managers:** Lehman Management; FLA Asset Management; and Prudential.

**Fixed-income manager:** Amalgamated Bank.

**Real estate manager:** Prudential.

Key personnel overseeing the investment management of the fund are Eleanor Tilson, executive director, and Frank Williams, director-finance and administration.

## City of Houston Retirement System

| | ($ millions) |
|---|---|
| Total assets* | 1,500 |
| Defined benefit | 1,500 |
| Employer contributions | 55 |
| Benefit payments | 42 |
| Portfolio insurance | 900 |
| *June 30, 1987 | |
| Passive investments: | |
| Indexed stocks | 75 |
| Alternative investments: | |
| International equities | 66 |
| Real estate equity | 43 |
| Hedging devices: | |
| Stock options | Y |
| Asset mix: | |
| Stocks | 60% |
| Bonds | 20% |
| Cash equivalents | 15% |
| Real estate equity | 3% |
| Other | 2% |

HOUSTON — The city of Houston's pension assets had a market value of $1.5 billion on June 30, 1987, a gain of 24.7% from the $1.203 billion reported as of Sept. 30, 1986.

At the end of October, the retirement fund lost about 10% of the market value of the assets it held Oct. 18, the day before the stock market plunge.

Different money managers work for the police, fire and municipal components of the city retirement fund.

**Equity managers:** Barrow, Hanley (police); Benchmark (fire); Eaton Vance (police); Gulf Investment (fire); IDS (police); Loomis Sayles (municipal and police); Mellon Capital (fire); Siebel Capital (municipal and police); Sun Bank (municipal and police); Texas Commerce (fire and municipal); Trinity (municipal); Waddell & Reed (police).

**Fixed-income managers:** A.I.M. Capital (police); Investment Advisors (police); Loomis Sayles (fire); MacKay-Shields (police); Standish, Ayer & Wood (municipal); Texas Commerce Bank (fire and municipal).

**International managers:** Alliance Capital (municipal); IDS (municipal); Schroder Capital (police).

**Option overwriting managers:** Analytic (all); Balch, Hardy & Scheinman (all).

**Real estate managers:** Coldwell Banker (fire); Eagle Realty (police); Equitec International (municipal); Equitec Realty (fire); JMB (municipal and police); Lehndorff & Babson (fire); Public Storage (fire); TCW (fire).

**Venture capital manager:** Genesis (all).

The master custodians are Texas Commerce Bank (firefighters); Centerre Bank & Trust (municipal); and Bankers Trust (police).

The investment management consultant is SEI Funds Evaluation.

Key personnel overseeing the investment management of the fund are George E. Cones Jr., chairman-firemens fund; Cliff Tuttle, chairman-municipal employees fund; and Dalton Baskin, chairman-police officers fund. George T. Odum is the pension plans administrator.

## Hughes Aircraft Co.

| | ($ millions) |
|---|---|
| Total assets* | 5,400 |
| Defined benefit | 3,800 |
| Thrift or savings/401(k) | 1,600 |
| Employer contributions | na |
| Benefit payments | na |

*From Money Market Directory

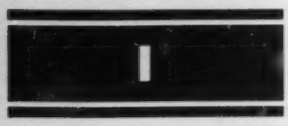
EL SEGUNDO, Calif. — Hughes Aircraft Co. had $5.4 billion in total employee benefit assets as of June 30, 1987, according to the Money Market Directory, an increase of 25.6% from the $4.3 billion reported as of Sept. 30, 1986.

**Managers:** (according to MMD) BEA; Capital Guardian; Chase Investors; CNA Insurance; Coldwell Banker; Dillon, Read; Forstmann-Leff; Frontier; G.T. Capital; General American Life; Hagler, Mastrovita & Hewitt; Jennison; Kurtz Capital; Leland O'Brien Rubinstein; MacKay-Shields; McKenzie, Walker; Mellon Capital; Neuberger & Berman; Oxford Partners; T. Rowe Price; Rowe Price-Fleming; PRIMCO; PRIMECAP; RCM Capital; Reich & Tang; RREEF; Scudder, Stevens &

Clark; TCW.

The master custodian is Bankers Trust.

Key personnel overseeing the investment management of the fund are W. Allen Reed, staff vice president-investments; R.T. Smith, manager benefits.



## IAM National Pension Fund

| ($ millions) | |
|---|---|
| Total assets | 1,454 |
| Defined benefit | 1,454 |
| Employer contributions | 65 |
| Benefit payments | 77 |
| Alternative investments: | |
| Real estate equity | 44 |
| Asset mix: | |
| Stocks | 48.7% |
| Bonds | 35.6% |
| Cash equivalents | 5.1% |
| Real estate equity | 3% |
| Other | 7.6% |

WASHINGTON — Benefit assets of the IAM National Pension Fund increased 21.4% to $1.454 billion as of Sept. 30 from $1.198 billion a year earlier.

**Equity managers:** Dodge & Cox; Lazard Freres; Stein Roe & Farnham; and State Street.

**Fixed-income managers:** Dodge & Cox; Stein Roe & Farnham; and State Street.

**Real estate manager:** Amivest.

The master trustee is State Street Bank.

Overseeing the investment management of the fund is Alan W. Skolnick, director.

## IBM Corp.

| ($ millions) | |
|---|---|
| Total assets | 22,457 |
| Defined benefit | 20,101 |
| Thrift or savings/401(k) | 2,356 |
| Employer contributions | 691 |
| Benefit payments | 465 |
| In-house assets | 10,649 |
| Hedging devices: | |
| Stock options | Y |
| Bond options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |

STAMFORD, Conn. — IBM Corp.'s total employee benefit assets grew 23.5% for the year ended Sept. 30, to $22.457 billion from $18.191 billion. Defined benefit assets grew 20.8%, to $20.101 billion from $16.64 billion. Fund officials would not release data as of Oct. 31.

**Equity managers:** Alliance; Bankers Trust; Citibank; Concord Capital; Capital Guardian; Delaware Investment Advisers; Dimensional Fund Advisors; Forstmann Little; Franklin Portfolio; G.T. Capital; Independence Investment; Jennison Associates; John Hancock Venture Capital; PM Portfolio; Resource Investors; Rowe Price-Fleming; Sasco Capital; Solomon Asset; State Street Bank; TCW Asset; T. Rowe Price; Warburg Pincus; and Wellington Management.

**Fixed-income managers:** Capital Guardian; Fisher, Francis, Trees & Watts; and Jennison Associates.

**Real estate managers:** Equitable; Prudential; and RREEF.

The master trustee is Chase Manhattan; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are J. Grills, assistant treasurer; W.V. Hoyt, director-investment strategy; and A.M. Shagory, director-investment research and operations.

## Public Employee Retirement System of Idaho

| ($ millions) | |
|---|---|
| Total assets | 1,309 |
| Defined benefit | 1,309 |
| Employer contributions | 73 |
| Benefit payments | 69 |
| Passive investments: | |
| Indexed stocks | 233 |
| Alternative investments: | |
| Private placements | 9 |
| Real estate equity | 92 |
| Mortgages | 78 |
| Mortgage-backed securities | 3 |
| Hedging devices: | |
| Stock options | Y |
| Asset mix: | |
| Stocks | 57.6% |
| Bonds | 22.6% |
| Cash equivalents | 6.5% |
| Real estate equity | 7.1% |
| Mortgages | 5.3% |
| Mortgage-backed securities | 0.2% |
| Private placements | 0.7% |

BOISE, Idaho — The Public Employee Retirement System of Idaho reported an increase of 19% in benefit assets as of Sept. 30, to $1.309 billion from $1.1 billion a year earlier.

**Equity managers:** Columbus Circle; Eaton Vance; John C. Hunt; Hutton; Investment Advisors; Matrix; Newell; Prudential; Frank Russell Trust; and Wellington.

**Fixed-income managers:** BEA; Sanford Bernstein: MacKay Shields; and Miller Anderson & Sherrerd.

**Real estate managers:** Equitable; First Interstate Bank; First Security Bank; Idaho First National Bank; idaho Bank & Trust; and Prudential.

The master custodian is Frank Russell Trust; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Lawrence J. Carson II, executive director, and Rionald V. Crouch, assistant director-fiscal.

## Illinois Municipal Retirement Fund

| ($ millions) | |
|---|---|
| Total assets | 3,536 |
| Defined benefit | 3,536 |
| Employer contributions | 125 |
| Benefit payments | 135 |
| In-house assets: | |
| Short term | 125 |
| Passive investments: | |
| Indexed stocks | 409 |
| Alternative investments: | |
| International equities | 303 |
| International bonds | 90 |
| Venture capital | 16 |
| Real estate equity | 138 |
| Asset mix: | |
| Stocks | 47.5% |
| Bonds | 37% |
| Cash equivalents | 11% |
| Real estate equity | 4% |
| Venture capital | 0.5% |

CHICAGO — The Illinois Municipal Retirement Fund had $3.536 billion in defined benefit assets as of Sept. 30, an increase of 18.7% from $2.98 billion the previous year. As a result of the market turmoil during October, the fund's assets fell 9.7% to $3.192 billion as of Nov. 1.

**Equity managers:** American National, Chicago; Baring; Dillon, Read; Dimensional; Fidelity Management Trust; MacKay-Shields; Nomura; and Schroder Capital.

**Fixed-income managers:** Julius Baer; Criterion; Fidelity Management Trust; Neuberger and Berman; and Payden & Rygel.

**Real estate managers:** First Chicago Investment; JMB; LaSalle; Security Capital; and TCW.

**Venture capital managers:** Abbott; Centennial; First Chicago Investment; and Oxford.

The master trustee is Harris Trust; the investment consultant is William M. Mercer-Meidinger-Hansen Inc.

Key personnel overseeing the investment management of the fund are Robert L. Cusma, executive director; Hiroshige Mori, assistant director-investments; and Walter J. Koziol, investment manager.

## Illinois State Board of Investment

| ($ millions) | |
|---|---|
| Total assets* | 2,600 |
| Defined benefit | 2,600 |
| Employer contributions | 28 |
| Benefit payments | na |
| *as of June 30, 1987 | |
| In-house assets: | |
| Equities | 419 |
| Fixed income | 964 |
| Short term | 265 |
| Alternative investments: | |
| International equities | 40 |
| Venture capital | 13 |
| LBOs | 15 |
| Real estate equity | 175 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 43.5% |

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| | |
|---|---|
| Bonds | 37.8% |
| Cash equivalents | 11% |
| Real estate equity | 6.7% |
| Venture capital | 1% |

CHICAGO — The Illinois State Board of Investment's total employee benefit assets increased 14% to $2.6 billion as of June 30 from the $2.28 billion reported as of Sept. 30, 1986.

**Equity managers:** Ariel; Cooke & Bieler; Disciplined; Fidelity; Lazard; Lincoln; Newbold's; TCW; Templeton; and Trinity.

**Real estate managers:** Aetna; First Chicago; Heitman; JMB; PSI; and VMS.

**Venture capital managers:** Frontenac; Golder, Thoma & Cressey; Hancock; and Menlo.

**LBO manager:** KKR.

The master custodian is Northern Trust; Stratford Advisers is the investment consultant for special situations.

Key personnel overseeing the investment management of the fund are Robert Harmon, director; Larry Darlington, fixed-income portfolio manager, and Bruce Poznak and Scott Pape, equity portfolio managers.

## Teachers' Retirement System of the State of Illinois

| ($ millions) | |
|---|---|
| Total assets | 7,053 |
| Defined benefit | 7,053 |
| Employer contributions | 217 |
| Benefit payments | 451 |
| Passive investments: | |
| Indexed stocks | 2,225 |
| Indexed bonds | 684 |
| Alternative investments: | |
| International equities | 451 |
| International bonds | 75 |
| Venture capital | 43 |
| Real estate equity | 245 |
| Hedging devices: | |
| Stock options | Y |
| Bond options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 50.6% |
| Bonds | 34.8% |
| Cash equivalents | 10.5% |
| Real estate equity | 3.5% |
| Venture capital | 0.6% |

SPRINGFIELD, Ill. — The Teachers' Retirement System of the State of Illinois had defined benefit assets of $7.053 billion as of Sept. 30, an increase of 18.5% from $5.952 billion the previous year.

**Equity managers** (Domestic): Alliance; American National of Chicago; Ariel; Capital Supervisors; Cedar Hill; and Kemper Financial.

(International): Kemper-Murray Johnstone and State Street Bank.

**Fixed-income managers:** Bear Stearns; Dreyfus Management; Marine Investment; PIMCO; and State Street Bank.

**Real estate managers:** Bennett & Kahnweiler; F.I.A.; First Chicago Investment; JMB; and TCW.

**Venture capital manager:** Frontenac.

The master trustee is Harris Trust; the investment consultant is Callan.

Key personnel overseeing the investment management of the fund are Samuel W. Anderson, executive director, and Charles F. Hofer, investment officer.

Consultants: Oct. 17.

## State Universities Retirement System of Illinois

| ($ millions) | |
|---|---|
| Total assets | 3,016 |
| Defined benefit | 3,016 |
| Employer contributions | 70 |
| Benefit payments | 130 |
| Passive investments: | |
| Indexed stocks | 942 |
| Indexed bonds | 465 |
| GICs | 27 |
| Alternative investments: | |
| International equities | 211 |
| Real estate equity | 225 |
| Hedging devices: | |
| Stock options | Y |
| Bond options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 55% |
| Bonds | 36% |
| Real estate equity | 8% |
| GICs | 1% |

CHAMPAIGN, Ill. — The State Universities Retirement System of Illinois' benefit assets increased 21.5% to $3.016 billion from $2.483 billion for the year ended Sept. 30.

The assets fell 10.5% to $2.7 billion as of Oct. 31, according to Kenneth L. Codlin, investment officer.

**Equity managers:** Batterymarch; PIMCO; Fayez Sarofim; and Wells Fargo.

**Fixed-income managers:** PIMCO and Wells Fargo.

**Real estate managers:** Aetna; JMB; and RREEF.

The fund's custodian is Northern Trust; Ennis, Knupp is the investment management consultant.

Key personnel overseeing the investment management of the fund are Mr. Codlin and Jeanne Valcik, pension analyst.

## Public Employees' Retirement Fund of Indiana

| ($ millions) | |
|---|---|
| Total assets | 2,158 |
| Defined benefit | 1,708 |
| Defined contribution | 450 |
| Employer contributions | 105 |
| Benefit payments | 95 |
| Passive investments: | |
| Indexed bonds | 400 |
| Private placements | 15 |
| Mortgage-backed securities | 240 |
| Asset mix: | |
| Bonds | 81% |
| Cash equivalents | 7% |
| Mortgage-backed securities | 12% |

INDIANAPOLIS — Assets of the Public Employees' Retirement Fund of Indiana increased to $2.158 billion for the year ended Sept. 30, 1987, up 6.8% from the $2.02 billion reported for the year ended Sept. 30, 1986.

**Fixed-income managers:** Bank One, Indianapolis; Indiana National Bank; Lehman Management; T. Rowe Price; and Prime Capital.

The investment consultant is SEI.

Key personnel overseeing the investment management of the fund are Laurence H. Earle II, executive secretary, and Michael A. Cherry, controller.

## Inland Steel Industries

| ($ millions) | |
|---|---|
| Total assets | 1,840 |
| Defined benefit | 1,581 |
| Thrift or savings | 259 |
| Employer contributions | 9 |
| Benefit payments | 97 |
| Passive investments: | |
| Indexed stocks | 43 |
| Dedicated/immunized | 374 |
| GICs | 123 |
| Alternative investments: | |
| International equities | 131 |
| Venture capital | 5 |
| Real estate equity | 97 |
| Mortgage-backed securities | 73 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 53% |
| Bonds | 18.1% |
| Cash equivalents | 10.4% |
| Real estate equity | 6.2% |
| Mortgage-backed securities | 4.5% |
| GICs | 7.8% |

CHICAGO — Inland Steel Industries employee benefit assets increased 11.4% to $1.84 billion as of Sept. 30 from $1.652 billion a year earlier. Defined benefit assets increased 14.3% to $1.581 billion from $1.383 billion.

Allan R. Phillips, consultant for the fund, estimated total assets dropped 11% as of Oct. 31, with defined benefit assets alone dropping almost 12%. After the crash, price changes and new investments of cash altered the asset mix. The mix as of Oct. 31 was 46% stocks, 27.4% bonds and mortgage-backed securities, 10.6% cash, 7.1% real estate equity and 8.9% GICs.

**Equity managers:** (Domestic) Sanford C. Bernstein; Citicorp Investment; Dillon, Read; Dimensional; First Chicago Investment; INVESCO; Oppenheimer Capital; Putnam Advisory; State Street Research; and Waddell & Reed.

(International): Baring; First Chicago International; Putnam International.

**Fixed-income managers:** Lincoln Income Group.

**Real estate managers:** Equitable; JMB; and Prudential.

The master trustee is Northern Trust; the investment consultant is DeMarche Associates.

Key personnel overseeing the investment management of the fund are Jay E. Dittus, treasurer; Richard J. Schutter, manager-pension investments; and Vicki L. Avril, assistant manager-pension investments.

## International Paper Co.

| ($ millions) | |
|---|---|
| Total assets | 2,500 |
| Defined benefit | 2,000 |
| Defined contribution | 500 |
| Employer contributions | 11 |
| Benefit payments | 85 |
| Portfolio insurance | 500 |
| Passive investments: | |
| GICs | 45 |
| Alternative investments: | |
| International equities | 40 |
| Real estate equity | 133 |
| Hedging devices: | |
| Stock index futures | Y |
| Fixed-income futures | Y |

NEW YORK — Assets of the International Paper Co. fund jumped 59.5% for the year ended Sept. 30, to $2.5 billion from $1.567 billion for the previous year. Data on the effect of the stock market volatility on the assets and the asset mix were not available.

**Equity managers:** Avatar; Sanford Bernstein; Geewax, Terker; Investment Counselors of Maryland; Manning & Napier; Miller, Anderson & Sherrerd; Neuberger & Berman; Provident Investment Counsel; TCW Asset; United Capital; and Yeager Wood & Marshall.

**Fixed-income managers:** J.P. Morgan; PIMCO; and State Sreet Research.

**Real estate managers:** Aldrich Eastman & Waltch; LaSalle Advisors; and RREEF.

**Other:** TSA Capital.

The master trustee is State Street Bank; the investment consultant is Buck.

Key personnel overseeing the investment management of the fund are Myra Drucker, director-trust investments; John C. Winchester, manager-trust investments; and Connie R. Caperella, manager-portfolio analysis.

## Iowa Public Employees Retirement System

| ($ millions) | |
|---|---|
| Total assets | 3,820 |
| Defined benefit | 3,820 |
| Employer contributions | 120 |
| Benefit payments | 135 |
| In-house assets: | |
| Short term | 110 |
| Passive investments: | |
| Indexed stocks | 46 |
| Alternative investments: | |
| Venture capital | 9 |
| LBOs | 49 |
| Real estate equity | 151 |
| Mortgage-backed securities | 305 |
| Hedging devices: | — |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 35% |
| Bonds | 48% |
| Cash equivalents | 3% |
| Real estate equity | 4% |
| Mortgage-backed securities | 8% |
| Venture capital/LBO | 2% |

DES MOINES, Iowa — Assets of the Iowa Public Employees Retirement System increased 14.3% to $3.82 billion in the year ended Sept. 30 from $3.341 billion. The fund lost $231 million because of the October stock market decline, but fund officials did not alter the asset mix because of the market havoc.

**Equity managers:** Batterymarch; Capital Guardian; IDS Growth Spectrum; Mellon; Provident Capital; Prudential Midco; Rosenberg; Value Investors; Wellington.

**Fixed-income managers:** Boston Co.; Criterion Investment; Loomis Sayles; Miller, Anderson & Sherrerd; J.P. Morgan.

**Real estate managers:** Aldrich, Eastman & Waltch; Copley; Heitman; JMB.

**Venture capital managers:** Allsop; Cable Howse; Gibbons, Green, Van Amerongen; Interven Partners; Invest America; Lawrence Venture Associates; Steinberg & Lyman; Welsh, Carson, Anderson & Stowe.

**LBO managers:** KKR; TCW.

The master custodian is Morgan Guaranty Trust; the investment consultant is Wilshire Associates.

Key personnel overseeing the investment management of the fund are Dennis L. Jacobs, Larry Thompson and Maurice Baringer.

## ITT Corp.

| ($ millions) | |
|---|---|
| Total assets | 3,015 |
| Defined benefit | 2,109 |
| Profit-sharing | 9 |
| Thrift or savings | 760 |
| Other | 137 |
| Passive investments: | |
| Indexed stocks | 51 |
| Alternative investments: | |
| International equities | 205 |
| Oil and gas | 9 |
| LBOs | 10 |
| Real estate equity | na |


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| | |
|---|---|
| Hedging devices: | |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 68.8% |
| Bonds | 16.5% |
| Cash equivalents | 8.8% |
| Real estate equity | 5.9% |

NEW YORK — ITT Corp.'s total benefit assets and pension assets grew 15% to $2.858 billion as of Sept. 30 from $2.482 billion the previous year. Total assets after the market drop of October were $2.3 billion, a drop of 19.5%. There was little effect on the asset mix.

**Equity managers:** Alliance Capital; Alliance Capital International; Fred Alger; Barrow, Hanley, Mewhinney & Strauss; Capital Guardian; First Manhattan; GAMCO; G.T. Capital; Jennison; Lazard Freres; Manufacturers Hanover; Northern Trust; Verus Capital.

**Fixed-income managers:** Alliance; Bank of America International; Morgan Guaranty; Morgan International; State Street Research & Management.

**Real estate managers:** Coldwell Banker; Corporate Property Investors; Equitable Real Estate; Metropolitan Life; RREEF.

**LBO managers:** Blackstone; KKR.

**Other managers:** Butler Capital; Morgan Petroleum; Alex Brown.

The master trustee and custodian is The Northern Trust Co.

Key personnel overseeing the investment management of the fund are Edwin J. Ehrlich is director of the ITT pension fund trust. Eileen C. Leahy is manager of the pension fund trust.

## K

### Kansas Public Employees' Retirement System

| | ($ millions) |
|---|---|
| Total assets | 3,311 |
| Defined benefit | 3,311 |
| Employer contributions | 105 |
| Benefit payments | 135 |
| In-house assets: | |
| Fixed income | 59 |
| Short term | 2 |
| Alternative investments: | |
| International equities | 112 |
| International bonds | 15 |
| Real estate equity | 149 |
| Mortgage-backed securities | 59 |
| Hedging devices: | |
| Stock options | Y |
| Bond options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 46% |
| Bonds | 32% |
| Cash equivalents | 11.5% |
| Real estate equity | 5% |
| Mortgage-backed securities | 2% |
| International stocks | 3% |
| International bonds | 0.5% |

TOPEKA, Kan. — Assets of the Kansas Public Employees' Retirement Fund increased 19.4% for the year ended Sept. 30, to $3.311 billion from $2.773 billion. Fund officials said assets decreased by more than $300 million, or 9%, in the October market drop.

**Equity managers:** (Domestic) Capital Supervisors; Investment and Capital Management; Market Research and Management; Pilgrim Baxter Greig; Provident Investment Counsel; and Reimer & Koger.

(International): Alliance; Nomura.

**Fixed-income managers:** (Domestic) Robert C. Brown; Pacific Investment; and Peters, Gamm and West.

(International): Julius Baer.

**Real estate manager:** J.W. O'Connor.

**Cash manager:** Payden & Rygel.

**Securities lending:** Marine Midland Bank.

The master domestic custodian is Commerce Bank & Trust; the master international custodian is Bankers Trust. The investment consultant is Callan Associates.

Key personnel overseeing the investment management of the fund are Larry Jones, chairman of the board of trustees, and Marshall Crowther, executive secretary.

### Kentucky Retirement Systems

| | ($ millions) |
|---|---|
| Total assets | 2,556 |
| Defined benefit | 2,556 |
| Employer contributions | 108 |
| Benefit payments | 80 |
| In-house assets: | |
| Equities | 350 |
| Fixed income | 19 |
| Short term | 244 |
| Passive investments: | |
| Indexed stocks | 350 |
| Alternative investments: | |
| Real estate equity | 82 |
| Mortgage-backed securities | 305 |
| Asset mix: | |
| Stocks | 50% |
| Bonds | 23% |
| Cash equivalents | 10% |
| Real estate equity | 3% |
| Mortgage-backed securities | 14% |

FRANKFORT, Ky. — The Kentucky Retirement Systems assets grew 21.3% in the year ended Sept. 30, to $2.556 billion from $2.108 billion.

As a result of the market crash, the fund's value slid 10% to $2.3 billion as of Oct. 31. The stock allocation

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dropped to 39% after the crash; the difference was made up mainly in the bond and cash segments, up four percentage points each.

**Equity managers:** Capital Supervisors.

**Fixed-income managers:** Capital Supervisors; and Munder Capital.

**Real estate managers:** Heitman.

The master custodian is Farmers Bank & Trust; the investment consultant is William M. Mercer-Meidinger-Hansen.

Bobby McKee, general manager, oversees investments for the fund.

## Kentucky Teachers' Retirement System

| | ($ millions) |
|---|---|
| Total assets* | 2,656 |
| Defined benefit | 2,656 |
| Employer contributions | 163 |
| Benefit payments | 157 |
| *as of June 30, 1987 | |
| In-house assets: | |
| Fixed income | 224 |
| Alternative investments: | |
| Real estate equity | 37 |
| Mortgages | 113 |
| Mortgage-backed securities | 146 |
| Asset mix: | |
| Stocks | 19.1% |
| Bonds | 48.5% |
| Cash equivalents | 21.3% |
| Real estate equity | 1.4% |
| Mortgages | 4.2% |
| Mortgage-backed securities | 5.5% |

FRANKFORT, Ky. — The Kentucky Teachers' Retirement System benefit assets increased 14% as of June 30, to $2.656 billion from $2.323 billion as of Sept. 30, 1986.

The fund escaped heavy damage in October, reporting a decline of only 2.4% to $2.593 billion as of Oct. 31.

As of the same date, the asset allocation had shifted as follows: stocks, 23.3%; bonds, 47.2%; cash, 15.7%; mortgage-backed securities, 8.1%; real estate equity, 1.5%; and mortgages, 4.2%.

**Equity managers:** Todd Investment and INVESCO.

**Fixed-income managers:** Todd Investment and First Kentucky.

**Real estate manager:** F.I.A.

The master custodian is Farmers Bank & Capital Trust.

Key personnel overseeing the investment management of the fund are Pat N. Miller, executive secretary; Stuart A. Reagan, deputy executive secretary; and Paul L. Yancey, investment analyst.

## K mart Corp.

| | ($ millions) |
|---|---|
| Total assets | 1,620 |
| Defined benefit | 970 |
| Thrift or savings | 650 |
| Employer contributions | 35 |
| Benefit payments | 23 |
| In-house assets: | |
| Fixed income | 91 |
| Passive investments: | |
| Indexed stocks | 50 |
| GICs | 225 |
| Alternative investments: | |
| Real estate equity | 69 |
| Mortgage-backed securities | 40 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 52% |
| Bonds | 9% |
| Cash equivalents | 9% |
| Real estate equity | 7% |
| GICs | 23% |

TROY, Mich. — K mart Corp.'s total employee benefit assets increased 15.8% in the 12 months ended Sept. 30, to $1.62 billion from $1.399 billion. Defined benefit assets alone increased 21.4%, to $970 million from $799 million.

The October market drop decreased total assets 13.6% to about $1.4 billion on Oct. 31. As of the same date, the asset mix was 44% stocks, 1% bonds, 10% cash equivalents, 8% real estate equity, 26% GICs and 1% stock options. The fund used options previously, but they were less than 1% of assets.

**Equity managers:** Alliance; Avatar; Capital Guardian; Dimensional Fund Advisors; and Midwest Investment.

**Real estate managers:** Equitec; JMB; and Security Capital.

**Options manager:** The Boston Co.

The master trustee is National Bank of Detroit.

The key person overseeing the investment management of the fund is John Steinbach, assistant treasurer and investment manager.

## Kraft Inc.

| | ($ millions) |
|---|---|
| Total assets | 1,710 |
| Defined benefit | 1,327 |
| 401(k) | 350 |
| ESOP | 33 |
| Employer contributions | 23 |
| Benefit payments | 90 |
| In-house assets: | |
| Equities | 50 |
| Short term | 10 |
| Passive investments: | |
| Indexed stocks | 80 |
| Alternative investments: | |
| International equities | 125 |
| Hedging devices: | |
| Stock options | Y |
| Bond options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 49% |
| Bonds | 19% |
| Cash equivalents | 6% |
| Annuities | 17% |
| International | 9% |

GLENVIEW, Ill. — Kraft Inc.'s total employee benefit assets declined 8.9% in the 12 months ended Sept. 30, to $1.710 billion from $1.877 billion, because of the transfer of assets when Dart & Kraft Inc. split into Kraft and Premark International Inc. Kraft's pension assets alone increased 2.4% in the year ended Sept. 30.

Kraft officials declined to state how the October market plunge affected assets.

**Equity managers** (Domestic): Atalanta/Sosnoff; Bankers Trust; BEA; Emerging Growth Partners; First Pacific; Neuberger & Berman; Ruane Cunniff; and Thorndike, Doran, Paine & Lewis.

(International): Mellon Pictet and Morgan Grenfell.

**Fixed-income managers:** Bankers Trust and Fischer, Francis, Trees & Watts.

The master trustees are Bankers Trust for pension assets and Northern Trust for 401(k) assets.

The key person overseeing the investment management of the fund is William H.S. Preece Jr., director-corporate finance.

# L

## Eli Lilly and Co.

| | ($ millions) |
|---|---|
| Total assets | 1,875 |
| Defined benefit | 1,135 |
| 401(k) | 740 |
| Employer contributions | 145 |
| Benefit payments | 45 |
| Passive investments: | |
| Indexed stocks | 185 |
| Dedicated/immunized | 83 |
| Alternative investments: | |
| International equities | 60 |
| Venture capital | 9 |
| LBOs | 2 |
| Real estate equity | 48 |
| Hedging devices: | |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 68% |
| Bonds | 14% |
| Cash equivalents | 14% |
| Real estate equity | 4% |

INDIANAPOLIS — Total employee benefit assets of Eli Lilly and Co. grew 31.6% to $1.875 billion as of Sept. 30, up from $1.425 billion the previous year. Defined benefit assets totaled $1.135 billion as of Sept. 30, up 29.7% from $875 million a year earlier.

As a result of the market turmoil during October, total employee benefit assets decreased 13.3% to $1.625 billion. Defined benefit assets dropped 13.2% to $985 million as of Nov. 1.

**Equity managers:** Ardsley; Capital Guardian; Mellon Capital; Nikko; Nomura; Reams; W.H. Reaves; and United Capital.

**Fixed-income managers:** Bank One, Indianapolis; and Northern Trust.

**Real estate managers:** JMB; RREEF; and First Wachovia.

The master trustee is Northern Trust.

Key personnel overseeing the investment management of the fund are B.J. "Jack" Miller, director-investments; Karen Hardwick, investment analyst-domestic; and Thomas Krake, investment analyst-international.

## Lockheed Corp.

| | ($ millions) |
|---|---|
| Total assets* | 8,025 |
| Defined benefit | 5,523 |
| Defined contribution | 2,502 |
| Employer contributions | na |
| Benefit payments | na |
| **P&I Age* estimate | |

CALABASAS, Calif. — *Pensions & Investment Age* estimates the total employee benefits of Lockheed Corp. rose 31.9% to $8.025 billion as of Sept. 30 from $6.085 billion the previous year. Defined benefit assets are estimated to have risen 28.1% during the same period, to $5.523 billion from $4.311 billion.

**Managers** (Defined benefit plan): Alliance; Anhalt/O'Connell; Bankers Trust; Batterymarch; Capital Guardian; Chase Investors; Citicorp Investment; Delaware Investment Advisers; First Interstate/Washington; Forstmann-Leff; Thomas L. Karsten; Lombard Odier International; Mellon Bank; J.P. Morgan; Payden & Rygel; RREEF; Royal Trust; SBC Portfolio; Security Pacific Investment; Smith Barney; TCW Asset; Wright Investment; and Western Asset.

(Defined contribution): Bankers Trust; Delaware Investment Advisers; Forstmann-Leff; Manufacturers Hanover Investment; Mellon Bank; Pacific Financial Research; Fayez Sarofim Trust; and TCW Asset.

The master trustee is Bankers Trust; the investment consultant is Bankers Trust.

George C. Weintz, investment counsel, oversees investment management of the fund.

## Los Angeles City Employees' Retirement System

| | ($ millions) |
|---|---|
| Total assets | 2,101 |
| Defined benefit | 2,101 |
| Employer contributions | 124 |
| Benefit payments | 129 |
| In-house assets: | |
| Short term | 179 |
| Passive investments: | |
| Indexed stocks | 255 |
| Asset mix: | |
| Stocks | 37% |
| Bonds | 54% |
| Cash equivalents | 9% |

LOS ANGELES — The Los Angeles City Employees' Retirement System had $2.101 billion in benefit assets as of Sept. 30, an increase of 15.3% from $1.822 billion the previous year.

However, between Sept. 30 and Nov. 1, the assets declined by 8% to $1.933 billion as a result of the market turmoil during October.

**Equity managers:** Alliance; Bankers Trust; Investment Advisors; Loomis, Sayles; Provident Capital; and Security Pacific.

**Fixed-income managers:** Favia Hill and Loomis, Sayles.

The master trustee is Irving Trust; the investment consultant is SEI.

Key personnel overseeing the investment management of the fund are Jerry Bardwell, manager-secretary; Oscar Peters, assistant manager; and Dan Gallagher, senior administrative assistant.

## Los Angeles County Employees' Retirement Association

| | ($ millions) |
|---|---|
| Total assets* | 8,262 |
| Defined benefit | 7,875 |
| Defined contribution | 323 |
| Thrift or savings | 13 |
| 401(k) | 51 |
| Employer contributions | 338 |
| Benefit payments | 336 |
| *as of June 30, 1987 | |
| In-house assets: | |
| Fixed income | 136 |
| Short term | 771 |
| Other | 170 |
| Alternative investments: | |
| Venture capital | 39 |
| Private placements | 143 |
| Real estate equity | 130 |
| Mortgages | 170 |
| Mortgage-backed securities | 632 |
| Asset mix: | |
| Stocks | 35.2% |
| Bonds | 31.1% |
| Cash equivalents | 21.4% |
| Real estate equity | 1.6% |
| Mortgages | 2.2% |
| Mortgage-backed securities | 8% |
| Venture capital | 0.5% |

LOS ANGELES — The Los Angeles County Employees' Retirement Association had $8.262 billion in total employee benefit assets as of June 30, an increase of 13.3% from $7.293 billion the previous year. Defined benefit assets increased 11.6% to $7.875 billion as of June 30, up from $7.055 billion a year earlier.

No data was available on the impact of the market crash on the fund.

**Equity managers:** Capital Guardian; Loomis, Sayles; Massachusetts Financial; Security Pacific; and Stein Roe.

**Fixed-income managers:** Brown Brothers Harriman; Capital Guardian; CMB; Criterion; Massachusetts Financial; and J.P. Morgan.

**Real estate managers:** Heitman; Goldman, Sachs; Prudential; Security Capital; Equitable; TCW Realty; and Trammel Crow.

**Venture capital managers:** Copley Venture Partners; Media Communication Partners; and Warburg Pincus.

**Cash manager:** Discount Corp. of New York.

The master custodian is Security Pacific National Bank; the investment consultant is Callan Associates.

The key person overseeing the investment management of the fund is Sandra Tracey, county treasurer and tax collector.

## Los Angeles Department of Water & Power Employees' Retirement Plan

| | ($ millions) |
|---|---|
| Total assets* | 1,470 |
| Defined benefit | 1,470 |
| Employer contributions | 112 |
| Benefit payments | 100 |
| *as of June 30, 1987 | |
| In-house assets: | |
| Short term | 96 |
| Alternative investments: | |
| Private placements | 29 |
| Mortgage-backed securities | 146 |
| Hedging devices: | |
| Stock options | Y |
| Asset mix: | |
| Stocks | 36% |
| Bonds | 50% |
| Cash equivalents | 5% |
| Mortgage-backed securities | 9% |

LOS ANGELES — The Los Angeles Department of Water and Power Employees' Retirement Plan had $1.476 billion in assets as of Sept. 30. A comparison to 1986's data would not be accurate because officials were unable to break out the death and disability fund assets for that year.

**Equity managers:** Bank of California; Boston Co.; and TCW.

**Options managers:** Boston Co. and TCW.

The master trustee is Bank of America; the investment consultant is SEI.

Key personnel overseeing the investment management of the fund are Richard W. Goss, retirement plan manager; Kathleen Thornton, assistant retirement plan manager; and Clarence F. Brawn, investment officer.

## Fire & Police Pension System — City of Los Angeles

| | ($ millions) |
|---|---|
| Total assets | 2,744 |
| Defined benefit | 2,744 |
| Employer contributions | 271 |
| Benefit payments | 238 |
| In-house assets: | |
| Short term | 167 |
| Passive investments: | |
| Indexed stocks | 529 |
| Alternative investments: | |
| Mortgage-backed securities | 139 |
| Hedging devices: | |
| Stock options | Y |
| Asset mix: | |
| Stocks | 57.9% |
| Bonds | 22.3% |
| Cash equivalents | 14.7% |
| Mortgage-backed securities | 5.1% |

LOS ANGELES — The Fire & Police Pension System — City of Los Angeles had $2.744 billion in employee benefit assets as of Sept. 30, an increase of 24% from $2.205 billion in assets the previous year.

The assets declined 14.4% to $2.349 billion as of Nov. 1, a result of the market turmoil during October. The asset mix as of Nov. 1 was 53.7% stocks, 28.5% bonds, 12.4% cash, and 5.4% mortgage-backed securities.

**Equity managers:** Alliance; Loomis, Sayles; Security Pacific; and Wright Investors.

**Fixed-income managers:** Boston Co.; Magten; Security Pacific; and Solomon Asset.

**Real estate managers:** Equitable; JMB; Prudential; and Security Capital.

**Options managers:** Balch, Hardy & Scheinman; MCQ; and Oppenheimer Capital.

The master custodian is Bankers Trust; the investment consultant is Callan Associates.

Key personnel overseeing the investment management of the fund are Gary Mattingly, general manager; Allan Moore, assistant manager; and Dennis Sugino, investment officer.

## Louisiana State Employees Retirement System

| | ($ millions) |
|---|---|
| Total assets | 1,944 |
| Defined benefit | 1,944 |
| Employer contributions* | 122 |
| Benefit payments | 202 |
| *as of June 30, 1987 | |
| In-house assets: | |
| Fixed income | 125 |
| Short term | 55 |
| Alternative investments: | |
| Private placements | 18 |
| Mortgage-backed securities | 174 |
| Asset mix: | |
| Stocks | 29% |
| Bonds | 48% |
| Cash equivalents | 13% |
| Mortgage-backed securities | 9% |
| Other | 1% |

BATON ROUGE, La. — Total employee benefit assets of the Louisiana State Employees fund increased by 7.6% to $1.944 billion from $1.806 billion for the 18 months ended Sept. 30.

**Balanced managers:** Boston Co.; Duff & Phelps; Hibernia National Bank; and Security Pacific.

The master custodian is Irving Trust; the investment consultant is SEI.

The key person overseeing the investment management of the fund is Vernon Strickland, chief investment officer.

## Teachers' Retirement System of Louisiana

| | ($ millions) |
|---|---|
| Total assets | 2,741 |
| Defined benefit | 2,741 |
| Employer contributions | 185 |
| Benefit payments | 300 |
| In-house assets: | |
| Short term | 300 |
| Alternative investments: | |
| International equities | 50 |
| Mortgage-backed securities | 300 |
| Asset mix: | |
| Stocks | 24.8% |
| Bonds | 53.8% |
| Cash equivalents | 11.4% |
| Mortgage-backed securities | 10% |

BATON ROUGE, La. — The Teachers' Retirement System of Louisiana recorded a 5.1% increase for the year ended Sept. 30, to $2.741 billion from $2.609 billion. That gain was wiped out in October's market decline; the fund reported total assets of $2.591 billion as of Oct. 31. Fund officials said the asset mix did not change because of the drop.

**Equity managers:** Boston Co.; Citicorp; Eagle Asset; and INVESCO.

**Fixed-income managers:** Centerre Trust; Criterion; Hibernia National Bank; Massachusetts Financial; and Scudder, Stevens & Clark.

The custodian is City National Bank of Baton Rouge; the investment consultant is SEI.

Key personnel overseeing the investment management of the fund are Jennifer Netterville, investment officer, and Carleton C. Page, director and secretary-treasurer.

Public funds: Nov. 28.

# M

## Maine State Retirement System

| | ($ millions) |
|---|---|
| Total assets | 1,390 |
| Defined benefit | 1,390 |
| Employer contributions | 148 |
| Benefit payments | 130 |
| Alternative investments: | |
| Oil and gas | 5 |
| Private placements | 28 |
| Asset mix: | |
| Stocks | 57% |
| Bonds | 35% |
| Cash equivalents | 8% |

AUGUSTA, Maine — Total assets of the Maine State Retirement System increased 26.4% for the 12 months ended Sept. 30 to $1.39 billion from $1.1 billion. Because of market volatility, assets slipped 11.8% during October, to $1.226 billion as of Oct. 31.

The asset mix had changed as of Oct. 31 to 43% stocks; 39% fixed income; and 18% cash equivalents.

**Equity managers:** Alliance; Casco Northern; Dillon, Read; Evans & Moxon; FLA Asset; Gouws Capital; Maine National Bank; and Putnam Advisors.

**Fixed-income managers:** Alliance; Massachusetts Financial; Morgan Guaranty; and Putnam Advisory.

**Real estate manager:** Property Capital.

**Other:** Morgan Guaranty.

The master custodian is Boston Safe Deposit & Trust; the investment consultant is Wilshire.

Key personnel overseeing the investment management of the fund are Claude Perrier, executive director, and William B. Ross, investment account coordinator.

## Martin Marietta Corp.

| | ($ millions) |
|---|---|
| Total assets | 2,809 |
| Defined benefit | 2,024 |
| Profit-sharing | 785 |
| Employer contributions | 107 |
| Benefit payments | 58 |
| In-house assets: | |
| Equities | 161 |
| Fixed income | 148 |
| Passive investments: | |
| GICs | 109 |
| Asset mix: | |
| Stocks | 37% |
| Bonds | 13% |
| Cash equivalents | 45% |
| GICs | 5% |

BETHESDA, Md. — Martin Marietta Corp.'s total employee benefit assets increased 32.3%, to $2.809 billion on Sept. 30, from $2.123 billion the previous year. Defined benefit assets increased 29.3% during the same period, to $2.024 billion from $1.565 billion.

**Equity managers**: Breau Capital; Capital Guardian; Pioneering; State Street Research; Robert E. Torray; Van Eck; and Value Investors.

**Fixed-income manager:** T. Rowe Price.

The master trustee is Bankers Trust; the investment consultant is Janney, Montgomery, Scott.

Key personnel involved in overseeing investment management of the fund are Wayne H. Shaner, assistant treasurer; Shawn M. Hendon, manager-pension investments; and Wendy J. Thomson, senior financial analyst.

## Maryland State Retirement and Pension Systems

| | ($ millions) |
|---|---|
| Total assets | 8,274 |
| Defined benefit | 8,274 |
| Employer contributions | 554 |
| Benefit payments | 480 |
| In-house assets: | |
| Equities | 1,968 |
| Fixed income | 1,155 |
| Short term | 376 |
| Passive investments: | |
| Indexed stocks | 1,908 |
| Alternative investments: | |
| Real estate equity | 100 |
| Asset mix: | |
| Stocks | 63.4% |
| Bonds | 35.4% |
| Real estate equity | 1.2% |

BALTIMORE — Benefit assets of the Maryland State Retirement and Pension Systems totaled $8.274 billion as of Sept. 30, an increase of 22.1% from the $6.778 billion reported as of June 30, 1986.

After Sept. 30, but before the Oct. 19 market crash, the fund sold $2.3 billion in equities and established a $4 billion dedicated bond portfolio. This resulted in an asset mix of 35% stocks, 50% dedicated bonds, 13% actively run bonds and 2% in real estate. As of Nov. 30, the asset mix had shifted further to 26.5% equities, 52.2% dedicated bonds, 20% active fixed income and 1.3% equity real estate.

**Equity managers:** Alliance; Atlanta; Capital Guardian; Dimensional Fund; Eaton Vance; Hagler, Mastrovita & Hewitt; Investment Advisors; Investment Counselors of Maryland; MacKay-Shields; Scudder, Stevens & Clark; State Street Research; and Wellington Trust.

**Fixed-income managers:** Investment Counsellors of Maryland; Mercantile Safe; Miller Anderson Sherrerd; Morgan Stanley Aaset; PIMCO; and Standish Ayer and Wood.

**Real estate managers:** CIGNA; Copely; J.P. Morgan; and Security Capital.

The master custodians are Depository Trust Co. and First National Bank of Maryland.

Key personnel overseeing the investment management of the fund are Howard J. France, executive director for investments; Arthur M. Lynch Jr., director of actively managed investments; and Lawrence J. Bach, director of passively managed investment.

## Pension Reserves Investment Management Board (of Massachusetts)

| | ($ millions) |
|---|---|
| Total assets | 2,202 |
| Employer contributions | 113 |
| Benefit payments | 25 |
| In-house assets: | |
| Short term | 15 |
| Passive investments: | |
| Indexed stocks | 438 |
| Indexed bonds | 221 |
| Alternative investments: | |
| International equities | 274 |
| Venture capital | 13 |
| Oil and gas | 3 |
| LBOs | 34 |
| Private placements | 5 |
| Real estate equity | 111 |
| Asset mix: | |
| Stocks | 55% |
| Bonds | 31.1% |
| Cash equivalents | 6.3% |
| Real estate equity | 5.4% |
| Other | 2.2% |

BOSTON — The Pension Reserves Investment Management Board reported assets of $2.202 billion as of Sept. 30, an increase of 33.8% from the $1.646 billion reported a year earlier.

Assets dropped 10.6% after the October market crash to $1.968 billion as of Oct. 31.

**Equity managers:** Alliance; Bear Stearns; Boston Co. Institutional; Lazard Freres; Trinity; and United States Trust, Boston.

**International managers:** Baring International Investment; N.M. Rothschild International; Schroder International; Scudder, Stevens & Clark; State Street Bank; and Warburg International.

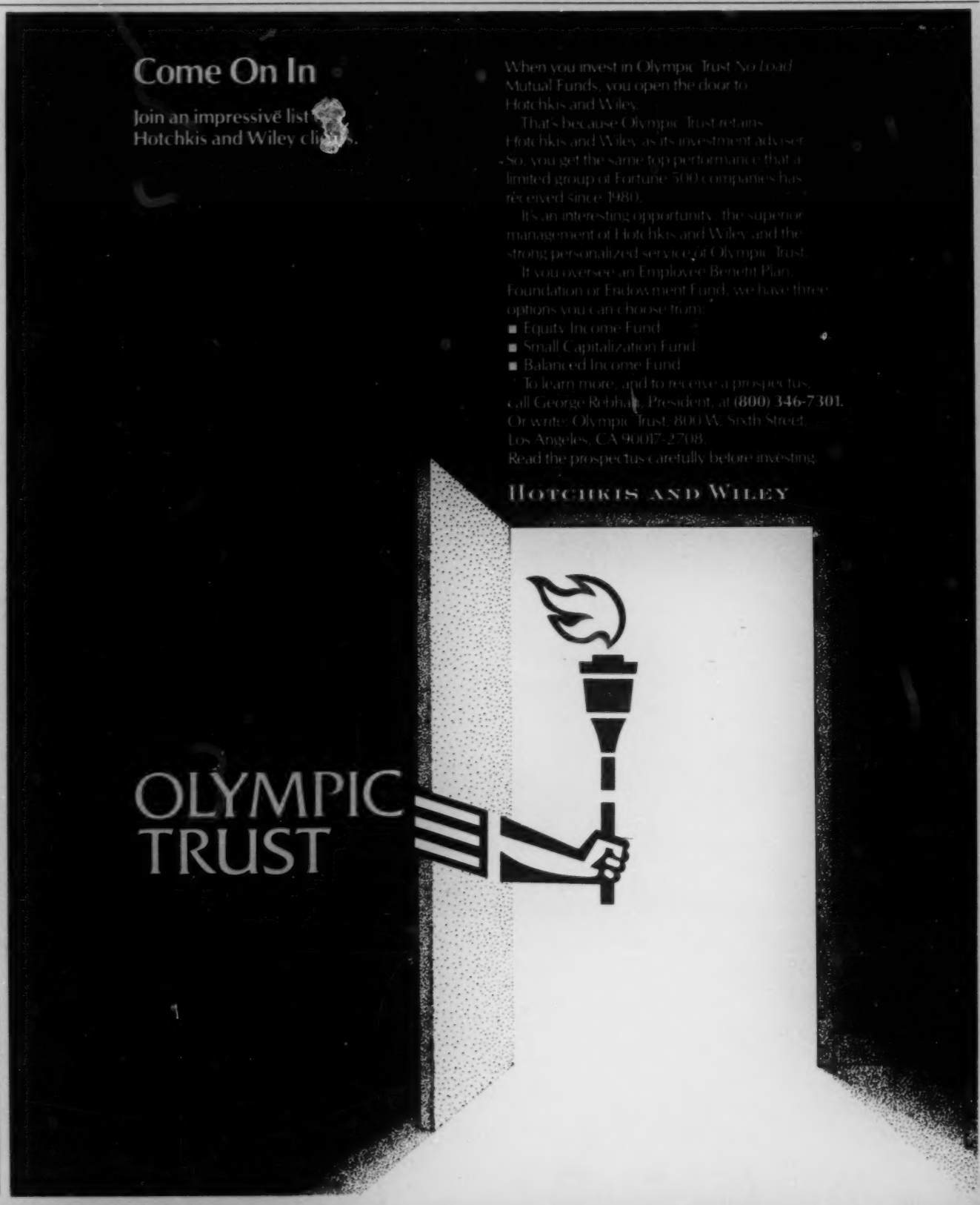
**Fixed-income managers:** Baring America; Lehman Management; One Federal Asset; Putnam Advisory; and M.D. Sass.

**Real estate managers:** Aldrich, Eastman & Waltch; Bank of Boston; Copley; John Hancock; Heitman; JMB; Lomas & Nettleton; Massachusetts Mutual; and TCW.

**Venture capital managers:** Davis Venture; Forstmann Little; John Hancock Venture; KKR; Smith Offshore; Southern California Ventures; Venture Capital Fund of New England; Vista III; Weintraub Entertainment.

The master custodian is State Street Bank; the investment consultant is Wilshire.

Key personnel overseeing the investment management of the fund are Paul F. Quirk, executive director, and Philip D. Kett, chief investment officer.

PROFILES

## Massachusetts State Board of Retirement

| | ($ millions) |
|---|---|
| Total assets | 3,500 |
| Defined benefit | 3,500 |
| Employer contributions | 550 |
| Benefit payments | 350 |
| In-house assets: | |
| Fixed income | 1,700 |
| Passive investments: | |
| Indexed stocks | 200 |
| Indexed bonds | 50 |
| Alternative investments: | |
| International bonds | 50 |
| Venture capital | 27 |
| Real estate equity | 30 |
| Asset mix: | |
| Stocks | 36% |
| Bonds | 55% |
| Cash equivalents | 7% |
| Real estate equity | 1% |
| Venture capital | 1% |

BOSTON — Total assets of the Massachusetts State Board of Retirement grew 0.7% for the 12 months ended Sept. 30, to $3.5 billion from $3.475 billion. Officials did not have information available on the fund's performance during October.

**Equity managers:** Eaton, Vance; Gardner & Preston Moss; Hagler, Mastrovita & Hewitt; Independence Investment; INVESCO; Keystone; Manufacturers Life; Standish, Ayer & Wood; and State Street Bank.

**Fixed-income managers:** Baring America; Fiduciary Trust International; Gardner & Preston Moss; W.R. Lazard; Loomis, Sayles; Miller, Anderson & Sherrerd; Pacific Investment; Standish, Ayer & Wood; and State Street Research.

The master custodian is State Street Bank; the investment consultant is Massachusetts Fiduciary.

Key personnel overseeing the investment management of the fund are Allen West, chief investment officer, and Maria Pino, senior investment officer.

## McDonnell Douglas Corp.

| | ($ millions) |
|---|---|
| Total assets | 6,800 |
| Defined benefit | 5,500 |
| Defined contribution | 1,300 |
| Employer contributions | na |
| Benefit payments | na |

ST. LOUIS — McDonnell Douglas Corp.'s total employee benefit assets rose 18.6%, to $6.8 billion as of Sept. 30, from $5.735 billion as of June 30, 1986. During the same period, defined benefit assets grew 24.8%, to $5.5 billion from $4.407 billion.

**Managers:** Aetna; Bankers Trust; Centerre Trust; Dimensional; LaSalle; RREEF; and TCW Realty.

The master trustee is Bankers Trust.

Key personnel overseeing the investment management of the fund are D. Hammerstein, director-retirement funds management; S.L. Kwiatek, manager-retirement funds management; and A.J. Mangoff, investment analyst.

## Merck & Co. Inc.

| | ($ millions) |
|---|---|
| Total assets | 1,377 |
| Defined benefit assets | 952 |
| Profit-sharing | 89 |
| Thrift or savings | 336 |
| Employer contributions | na |
| Benefit payments | 59 |
| Alternative investments: | |
| International equities | 70 |
| International bonds | 21 |
| Venture capital | 4 |
| Oil and gas | 10 |
| Real estate equity | 59 |
| Mortgage-backed securities | 23 |
| Hedging devices: | |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 67% |
| Bonds | 19% |
| Cash equivalents | 5% |
| Real estate equity | 6% |
| Other | 3% |

RAHWAY, N.J. — As of Sept. 30, Merck & Co. Inc. had total employee benefit assets of $1.377 billion, an increase of 46.6% from $939 million the previous year. Defined benefit assets totaled $952 million as of Sept. 30, an increase of 21.3% from $785 million a year earlier.

Defined benefits declined 16.8% during October, totaling $792 million as of Nov. 1. Asset totals for the company's other benefit plans were not available. A company executive said no changes in the pension fund's asset mix were anticipated as a result of the market's drop.

**Equity managers:** Capital Guardian; Concord; J.P. Morgan; Siebel; and State Street Research.

**Fixed-income manager:** J.P. Morgan.

**Real estate manager:** J.P. Morgan and Prudential Realty.

**Venture capital manager:** Alliance.

**Oil and gas manager:** J.P. Morgan.

The master trustee is Bankers Trust.

Key personnel overseeing the investment management of the fund are Lee M. Hale, assistant treasurer; Charles Freund, director of pensions and benefits investments; and Judy C. Lewent, vice president and treasurer.

## Metropolitan Life Insurance Co.

| | ($ millions) |
|---|---|
| Total assets | 3,113 |
| Defined benefit | 2,318 |
| Thrift or savings/401(k) | 730 |
| Other | 65 |
| Employer contributions | 22 |
| Benefit payments | 125 |
| In-house assets: | |
| Equity | 579 |
| Fixed income | 1,484 |
| Other | 255 |
| Alternative investments: | |
| Real estate equity | 255 |
| Asset mix: | |
| Stocks | 25% |
| Bonds | 48% |
| Real estate equity | 11% |

NEW YORK — Metropolitan Life Insurance Co.'s own employee benefit assets grew 10.1% to $3.113 billion from $2.828 billion during the year ended Sept. 30; defined benefit assets increased 7.8% during the same period, to $2.318 billion from $2.15 billion. All assets are managed internally.

Most of the gains were lost during the month of October, however, when total assets slid 6.8% to $2.9 billion as of Oct. 31.

The portfolio mix changed as a result of the market crash: stocks were reduced to 20%; fixed income was increased to 68%; and real estate equity was raised slightly to 12%.

The company's corporate management office oversees investment management of the assets; J.L. Rubsam, administrator, has day-to-day responsibility.

## Michigan State Employees' Retirement Systems

| | ($ millions) |
|---|---|
| Total assets | 16,680 |
| Defined benefit | 16,073 |
| Thrift or savings | 584 |
| 401(k) | 23 |
| Employer contributions | 827 |
| Benefit payments | 932 |
| In-house assets: | |
| Equities | 7,876 |
| Fixed income | 5,626 |
| Short term | 2,411 |
| Other | 160 |
| Alternative investments: | |
| Venture capital | 196 |
| LBOs | 110 |
| Private placements | 1,000 |
| Real estate equity | 87 |
| Mortgages | 1,003 |
| Mortgage-backed securities | 1,100 |
| Hedging devices: | |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 48.4% |
| Bonds | 21.2% |
| Cash equivalents | 15% |
| Real estate equity | 0.5% |
| Mortgages | 6.2% |
| Mortgage-backed securities | 6.8% |
| Venture capital/LBOs | 1.9% |

LANSING, Mich. — Total benefit assets of the Michigan State Employees' Retirement Systems grew 22.8% to $16.68 billion as of Sept. 30, 1987, from $13.58 billion as of Aug. 31, 1986. Defined benefit assets alone rose 18.4%, to $16.073 billion from $13.58 billion. All assets are managed internally.

Because of the market volatility, total assets dropped 10.6%, to roughly $14.9 billion, and pension assets dropped 11%, to roughly $14.3 billion, as of Oct. 31.

Michigan had been selling stocks in the days before the Oct. 19 plunge, bringing its equity allocation down to 36.1% by the end of the month. Other asset classes whose allocations changed significantly by Oct. 31 were cash, up to 22%, and bonds, up to 24.2%.

The master custodian is the state treasurer, with settlement services provided by National Bank of Detroit.

Key personnel overseeing the investment management of the fund are Robert A. Bowman, state treasurer; W.A. Amerman, director of investments; and Barry Stevens and Gordon Linsday, assistant directors.

## City of Milwaukee Employes' Retirement System

| | ($ millions) |
|---|---|
| Total assets | 1,355 |
| Defined benefit | 1,355 |
| Employer contributions | 40 |
| Benefit payments | 50 |
| Passive investments: | |
| Dedicated/immunized | 163 |
| Alternative investments: | |
| Real estate equity | 15 |
| Mortgage-backed securities | 125 |
| Asset mix: | |
| Stocks | 44% |
| Bonds | 37% |
| Cash equivalents | 7% |
| Real estate equity | 2% |
| Mortgage-backed securities | 9% |
| Other | 1% |

MILWAUKEE — Benefit assets of the City of Milwaukee Employes' Retirement System rose 14.2% during the 12-month period ended Sept. 30, to $1.355 billion from $1.187 billion.

Plan assets had dropped 9.3% by the end of October, to $1.229 billion. Because of the crash, stocks declined as a percentage of total assets, while bonds rose. The asset mix changed to 38% stocks, 41% bonds, 8% cash, 2% real estate equity, 10% mortgage-backed securities and 1% other.

**Equity managers:** Alliance; Delaware; INVESCO; and the Wisconsin State Investment Board.

**Fixed-income managers:** Criterion; First Wisconsin Trust; and Loomis, Sayles.

**Real estate managers:** The fund invests with managers Aetna and JMB through Institutional Property Consultants.

**SBA loans manager:** Marine Trust.

The master trustee is First Wisconsin Trust; the investment consultants are SEI and Ennis, Knupp.

Key personnel overseeing the investment management of the fund are Robert G. Nehls, secretary and executive director; and Duamel Vellon, assistant secretary and executive director.

## Minnesota Mining & Manufacturing Co.

| | ($ millions) |
|---|---|
| Total assets | 2,843 |
| Defined benefit | 2,387 |
| Defined contribution | 456 |
| Employer contributions | 0 |
| Benefit payments | 65 |
| Passive investments: | |
| Indexed stocks | 278 |
| Alternative investments: | |
| International equities | 172 |
| Venture capital | 13 |
| LBOs | 41 |
| Private placements | 200 |
| Real estate equity | 108 |
| Mortgages | 20 |
| Mortgage-backed securities | 125 |
| Hedging devices: | |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 67% |
| Bonds | 16% |
| Cash equivalents | 4% |
| Real estate equity | 5% |
| Mortgages | 1% |
| Mortgage-backed securities | 5% |
| Other | 2% |

ST. PAUL, Minn. — Minnesota Mining & Manufacturing Co.'s total employee benefit assets rose 28% to $2.843 billion as of Sept. 30, up from $2.221 billion the previous year. Defined benefit assets climbed 24.1% to $2.387 billion as of Sept. 30, up from $1.924 billion a year earlier.

As a result of the market's turmoil during October, fund officials estimate the defined benefit assets fell about 14% to approximately $2.05 billion. Fund officials decided to reduce the fund's domestic and international equity exposure to 50% of total assets, from 67%, moving $250 million to $300 million into short-term, fixed-income instruments between Nov. 5 and Dec. 1.

**Equity managers:** Alliance; Brignoli, Curley & Roberts; Franklin Portfolio; Grantham, Mayo, Van Otterloo; IDS Advisory; Liberty Square; Management Asset; Mellon Capital; T. Rowe Price; Schroder; Trinity; TSA; and ValueQuest.

**Fixed-income managers:** Hoisington; Minnesota Mutual; Pacific Investment; and Sun Life.

**Real estate managers:** Citibank; Equitable; JMB; RCB Realty; RREEF; and TCW.

**Other managers:** HLM Partners and Forstmann Little.

The master trustees are Boston Safe Deposit and Trust, and First Trust Co., St. Paul. The investment consultant is Lewis Bailey Associates.

Key personnel overseeing the investment management of the fund are

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Janet L. Yeomans, director-investments, and Rajbir S. Kang, senior pension fund analyst.

## Minnesota State Board of Investment

| | ($ millions) |
|---|---|
| Total assets* | 9,706 |
| Defined benefit | 9,305 |
| Defined contribution | 401 |
| Employer contributions | na |
| Benefit payments | na |
| *as of June 30, 1987 | |
| In-house assets: | |
| Equities | 766 |
| Fixed income | 3,036 |
| Short term | 360 |
| Passive investments: | |
| Indexed stocks | 2,174 |
| Dedicated/immunized | 2,560 |
| GICs | 5 |
| Alternative investments: | |
| Venture capital | 86 |
| Oil and gas | 63 |
| Real estate equity | 396 |
| Hedging devices: | |
| Stock options | Y |
| Bond options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 43.8% |
| Bonds | 42.6% |
| Cash equivalents | 7.8% |
| Real estate equity | 4.2% |
| Other | 1.6% |

ST. PAUL, Minn. — The Minnesota State Board of Investment's total employee benefit assets increased 12.1% to $9.706 billion from $8.658 billion for the year ended June 30. Defined benefit assets rose 13.2% during the same period, to $9.305 billion from $8.222 billion.

**Equity managers:** Fred Alger; Alliance; Beutel Goodman; BMI; Forstmann Leff; Hellman Jordan; IDS Advisory; Investment Advisers; Lieber; Peregrine; Waddell and Reed; and Wilshire.

**Fixed-income managers:** Investment Advisers; Lehman Management; Miller, Anderson & Sherrerd; Morgan Stanley; Peregrine; and Western Asset.

**Real estate managers:** Aetna; Equitable; Heitman; Prudential; RREEF; State Street Bank; and TCW.

**Venture capital/LBO managers:** Allied Venture; DSV; IAI; Inman and Bowman; KKR; Matrix Partners; Norwest Venture; Smith Barney Venture; Summit Ventures.

**Oil and gas managers:** Apache and First Reserve.

**Cash manager:** State Street Bank.

The master custodian is State Street Bank; the investment consultant is Richards & Tierney.

Key personnel overseeing the investment management of the fund are Howard Bicker, executive director; Jeff Bailey, assistant executive director; and Beth Lehman, assistant to executive director.

## Public Employees' Retirement System of Mississippi

| | ($ millions) |
|---|---|
| Total assets | 3,218 |
| Defined benefit | 3,218 |
| Employer contributions | 168 |
| Benefit payments | 159 |
| Passive investments: | |
| Indexed stocks | 515 |
| Indexed bonds | 980 |
| Alternative investments: | |
| Mortgage-backed securities | 400 |
| Asset mix: | |
| Stocks | 25% |
| Bonds | 58% |
| Cash equivalents | 5% |
| Mortgage-backed securities | 12% |

JACKSON, Miss. — Assets of The Public Employees' Retirement System of Mississippi rose 18.5% to $3.218 billion from $2.716 billion for the year ended Sept. 30. The fund lost about 4.5% of its total assets because of the Oct. 19 stock market drop, but no changes in asset mix were made.

**Equity managers:** Bankers Trust; Boston Co.; INVESCO; Fayez Sarofim; and Sun Bank.

**Fixed-income managers:** Criterion; Dreyfus; Lehman; PIMCO; and Wells Fargo Investment Advisors.

The master custodian is Trustmark National Bank; the investment consultant is SEI.

Key personnel overseeing the investment management of the fund are Eddie B. Vandiver, deputy director-investments; and Ronald D. Logan, investment manager.

## Public School Retirement System of Missouri

| | ($ millions) |
|---|---|
| Total assets* | 3,196 |
| Defined benefit | 3,196 |
| Employer contributions | 251 |
| Benefit payments | na |
| *From Money Market Directory | |
| Alternative investments: | |
| Mortgage-backed securities | 767 |
| Asset mix: | |
| Stocks | 10% |
| Bonds | 59% |
| Cash equivalents | 7% |
| Mortgage-backed securities | 24% |

JEFFERSON CITY, Mo. — Assets of the Public School Retirement System of Missouri apparently decreased 2.3% in the 12 months ended June 30, to $3.196 billion from the $3.274 billion the fund reported a year earlier.

The fund would not supply data or an explanation of the apparent drop.

Its investment managers, as reported in Money Market Directory, are as follows.

**Managers:** Boatmen's National Bank; Centerre Trust; and United Missouri Investment Counsel.

The master custodian is Boatmen's National Bank; the investment consultant is DeMarche Associates.

The key person overseeing the investment management of the fund is David W. Mustoe, executive secretary.

## Mobil Oil Corp.

| | ($ millions) |
|---|---|
| Total assets | 4,336 |
| Defined benefit | 2,260 |
| Defined contribution | 1,900 |
| PAYSOP | 176 |
| Employer contributions | na |
| Benefit payments | na |
| Passive investments: | |
| Indexed stocks | 157 |
| Dedicated/immunized | 361 |
| GICs | 78 |
| Alternative investments: | |
| International equities | 23 |
| Mortgage-backed securities | 177 |
| Asset mix: | |
| Stocks | 48% |
| Bonds | 24% |
| Cash equivalents | 9% |
| Mortgage-backed securities | 8% |
| GICs | 3% |
| Insurance accounts | 8% |

NEW YORK — Mobil Oil Corp.'s total employee benefit assets grew 10.3% in the 12 months ended Sept. 30, to $4.336 billion from $3.93 billion. Defined benefit assets grew 3.7%, to $2.26 billion from $2.18 billion during the same period.

**Equity managers:** Alliance; Bankers Trust; Capital Guardian; Chase Investors; Citicorp Investment; Jennison; Miller, Anderson & Sherrerd; Fayez Sarofim; State Street Research; and Wells Fargo Investment.

**Fixed-income managers:** State Street Research and U.S. Trust of New York.

**Insurance managers:** Aetna and Metropolitan Life.

The master trustee is U.S. Trust of New York for pension assets, and Bankers Trust for the defined contribution and PAYSOP assets.

Key personnel overseeing investment management are Robert B. Hahnen, manager of corporate benefits-finance; and Andrea R. Hahn, assistant manager of corporate benefits-finance.

## Monsanto Co.

| | ($ millions) |
|---|---|
| Total assets | 4,300 |
| Defined benefit | 3,500 |
| Thrift or savings/401(k) | 800 |
| Employer contributions | 30 |
| Benefit payments | 175 |
| In-house assets: | |
| Fixed income | 70 |
| Alternative investments: | |
| International equities | 300 |
| Real estate equity | 200 |
| Hedging devices: | |
| Stock options | Y |
| Bond options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 65% |
| Bonds | 28% |
| Cash equivalents | 8% |
| Real estate equity | 7% |


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ST. LOUIS — Monsanto Co.'s total total benefit assets increased 31.1% in the year ended Sept. 30, to $4.3 billion from $3.28 billion a year earlier. In the same period, the defined benefit assets increased 39%, to $3.5 billion from $2.52 billion. W.N. Searcy, manager-pension asset management, would not release figures as of Oct. 31.

**Managers:** Analytic Investment; Brown Capital; Capital Guardian; Centerre Trust; Citicorp; Martin Currie; Delaware Investment; Equitable Life; Fischer, Francis, Trees & Watts; Hagler, Mastrovita and Hewitt; Hotchkis and Wiley; Jennison; Kurtz Capital; Lincoln Capital; Lord, Abbett; J.P. Morgan; T. Rowe Price; Rowe Price-Fleming; RCM; Security Pacific Investment; Standish, Ayer & Wood; State Street Research; STW; Trinity Investment Management; and United States Trust, New York.

**Real estate managers:** Landauer; LaSalle Advisors; RREEF; and TCW Realty.

The master trustee is Northern Trust; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are A.E. Wolfarth, assistant treasurer; W.N. Searcy, manager-pension asset management; and W.H. Crabbin, pension analyst.

## Motorola Inc.

| | ($ millions) |
|---|---|
| Total assets* | 1,358 |
| Defined benefit | 470 |
| Defined contribution | 888 |
| Employer contributions | na |
| Benefit payments | na |

*From Money Market Directory

SCHAUMBURG, Ill. — As of March 31, Motorola Inc.'s total employee benefit assets increased 2.5% to $1.358 billion from $1.325 billion a year earlier. Defined benefit assets increased 17.5% during the same period, to $470 million from $400 million.

According to the Money Market Directory, the managers are as follows.

**Equity managers:** (Domestic) Capital Guardian; Chase Manhattan; Jennison; Lehman; Lincoln; and State Street Research.

(International) J.P. Morgan.

**Fixed-income managers:** Brown Brothers Harriman; Scudder, Stevens & Clark; and Stein Roe & Farnham.

**Other managers:** Delaware Investment and Morgan Grenfell.

The master trustee is Harris Trust & Savings Bank.

Key personnel overseeing the investment management of the fund are Garth Milne, vice president and treasurer, and William H. Clarkin Jr., assistant treasurer.

# N

## National Electrical Contractors Association

| | ($ millions) |
|---|---|
| Total assets | 2,770 |
| Defined benefit | 2,770 |
| Employer contributions | 167 |
| Benefit payments | 147 |
| Passive investments: | |
| Indexed stocks | 534 |
| Indexed bonds | 887 |
| Alternative investments: | |
| Real estate equity | 229 |
| Mortgages | 100 |
| Asset mix: | |
| Stocks | 28.5% |
| Bonds | 47.5% |
| Cash equivalents | 15.8% |
| Real estate equity | 8.2% |

ARLINGTON, Va. — The National Electrical Contractors Association Pension Benefit Trust Fund had $2.77 billion in total employee benefit assets as of Sept. 30.

**Equity manager:** ASB Capital.

**Fixed-income manager:** ASB Capital.

**Real estate manager:** ASB Capital.

The master trustee is Boston Safe Deposit; the investment consultant is ASB Capital.

Key personnel overseeing the investment management of the fund are John M. Grau and Jack F. Moore, trustees, and Anthony J. Salamone, executive secretary-treasurer.

## National Rural Electric Cooperative Association

| | ($ millions) |
|---|---|
| Total assets | 2,048 |
| Defined benefit | 1,746 |
| Thrift or savings/401(k) | 302 |
| Employer contributions | na |
| Benefit payments | na |
| In-house assets: | |
| Equities | 267 |
| Fixed income | 238 |
| Short term | 122 |
| Passive investments: | |
| Indexed stocks | 212 |
| Indexed bonds | 50 |
| Alternative investments: | |
| International equities | 163 |
| Venture capital | 2 |
| Mortgage-backed securities | 5 |
| Asset mix: | |
| Stocks | 64% |
| Bonds | 20% |
| Cash equivalents | 15% |
| Mortgage-backed securities | 1% |

WASHINGTON — Total benefit and pension assets for National Rural Electric Cooperative Association increased 32.1% to $2.048 billion from $1.55 billion for the year ended Sept. 30. Total assets as of Oct. 31 fell to $1.782 billion — a decline of 13%. As a result of the market drop, the fund continued to move to fixed income. The asset mix Oct. 31 was 53% stock; 31% bonds; 15% cash equivalents and 1% mortgage-backed securities.

**Equity managers:** Bankers Trust; Barrow Hanley; C-S Capital; Capital Guardian; Chesapeake Capital; Grantham Mayo; J.P. Morgan.

**Fixed-income manager:** Lincoln Income Group.

**Venture capital manager:** Saugatuck.

The master trustee and custodian is State Street.

Key personnel overseeing the investment management of the fund are Peter R. Morris, manager-investments; Stuart E. Teach, senior equity portfolio manager; Douglas G. Kern, senior fixed-income portfolio manager.

Master trust: Aug. 22.

## Navistar International Corp.

| | ($ millions) |
|---|---|
| Total assets | 1,606 |
| Defined benefit | 1,600 |
| 401(k) | 6 |
| Employer contributions | 0 |
| Benefit payments | 228 |
| Passive investments: | |
| Dedicated/immunized | 1,584 |
| Hedging devices: | |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 1% |
| Bonds | 99% |

CHICAGO — Navistar International Corp.'s employee benefit assets fell 3% in the year ended Sept. 30, 1987, to $1.606 billion from $1.655 billion. Defined benefit assets fell by the same

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amount, to $1.6 billion from $1.65 billion a year earlier.

The fund, which has been almost totally invested in a dedicated bond portfolio for several years, was virtually unaffected by the October stock market crash.

**Equity manager:** M.B. O'Higgins.

**Fixed-income managers:** Jennison; J.P. Morgan.

The master trustee is Bankers Trust.

Key personnel overseeing the investment management of the fund are Terry Endsley, manager-pension investments, and Robert C. Lannert, vice president and treasurer.

Public funds: Nov. 28.

## Public Employees Retirement System of Nevada

| | ($ millions) |
|---|---|
| Total assets | 2,515 |
| Defined benefit | 2,515 |
| Employer contributions | 168 |
| Benefit payments | 85 |
| In-house assets: | |
| Fixed income | 51 |
| Other | 4 |
| Passive investments: | |
| Indexed stocks | 391 |
| Alternative investments: | |
| International equities | 50 |
| Venture capital | 5 |
| Real estate equity | 135 |
| Mortgages | 134 |
| Mortgage-backed securities | 188 |
| Hedging devices: | |
| Stock options | Y |
| Asset mix: | |
| Stocks | 41.8% |
| Bonds | 41% |
| Real estate equity | 5% |
| Mortgages | 5% |
| Mortgage-backed securities | 7% |
| Venture capital | 0.2% |

CARSON CITY, Nevada — The Public Employees Retirement System of Nevada had a 22.8% increase in assets for the year ended Sept. 30, to $2.515 billion from $2.048 billion. Because of the market turmoil in October, the system's assets declined 7.3% to $2.33 billion as of Oct. 31.

**Equity managers:** Alliance; Axe Core; Criterion; Dimensional Fund; INVESCO; Loomis Sayles; and Wells Fargo.

**Fixed-income managers:** Criterion; Patterson Capital; Putnam Advisory; and State Street Research.

**Real estate managers:** Heitman; JMB; Karsten; J.P. Morgan; PMRealty; Prudential; and TCW.

**Venture capital managers:** Bay Partners; Criterion Venture Fund; and Columbine.

**Options mangers:** Bankers Trust and Balch Hardy.

The master custodian is Nevada National Bank; the investment consultants are Mercer-Meidinger-Hansen and Pension Realty Advisors.

Key personnel overseeing the investment management of the fund are Wilbur W. Keating, executive officer, and Laura B. Wallace, investment officer.

## New Jersey Division of Investment

| | ($ millions) |
|---|---|
| Total assets* | 19,785 |
| Defined benefit | 19,570 |
| Thrift or savings/401(k) | 215 |
| Employer contributions | 750 |
| Benefit payments | 950 |
| *as of June 30, 1987 | |
| In-house assets: | |
| Equities | 10,036 |
| Fixed income | 6,893 |
| Short term | 479 |
| Other | 2,162 |
| Alternative investments: | |
| Private placements | 50 |
| Mortgage-backed securities | 2,162 |
| Hedging devices: | |
| Stock options | Y |
| Asset mix: | |
| Stocks | 51.3% |
| Bonds | 35.2% |
| Cash equivalents | 2.5% |
| Mortgage-backed securities | 11% |

TRENTON, N.J. — The New Jersey Division of Investment's employee benefit assets grew 17.1% during the 12 months ended June 30, to $19.785 billion from $16.901 billion. Defined benefit assets alone grew 17.4% during the same period. All the assets are managed internally.

A group of 12 banks serves as custodian.

Key personnel overseeing the investment management of the fund are Roland M. Machold, director; William P. Mooney, deputy director; and Stephen Kornrumpf, assistant director.

## New Mexico Educational Retirement Board

| | ($ millions) |
|---|---|
| Total assets* | 1,482 |
| Defined benefit | 1,482 |
| Employer contributions | 74 |
| Benefit payments | 76 |
| *book value as of Oct. 31, 1987 | |
| In-house assets: | |
| Equities | 30 |
| Fixed income | 1,245 |
| Short term | 59 |
| Other | 148 |
| Alternative investments: | |
| Mortgage-backed securities | 148 |
| Asset mix: | |
| Stocks | 2% |
| Bonds | 84% |
| Cash equivalents | 4% |
| Mortgage-backed securities | 10% |

SANTA FE, N.M. — The book value of total pension assets of the New Mexico Educational Retirement Board increased 10.5%, in the year ended Oct. 31, to $1.482 billion from $1.341 billion. All assets are managed internally.

The master custodian is Irving Trust; the investment consultant is Von Nelson, Scarborough & McConnell.

Key personnel overseeing the investment management of the fund are Robert Short and Patricia Griego, investment officers.

## New Mexico Public Employees Retirement Association

| | ($ millions) |
|---|---|
| Total assets | 1,471 |
| Defined benefit | 1,471 |
| Employer contributions | 76 |
| Benefit payments | 50 |
| In-house assets: | |
| Other | 38 |
| Alternative investments: | |
| Private placements | 23 |
| Real estate equity | 38 |
| Mortgages | 4 |
| Mortgage-backed securities | 116 |
| Asset mix: | |
| Stocks | 39% |
| Bonds | 40% |
| Cash equivalents | 11% |
| Real estate equity | 2% |
| Mortgages | 0.2% |
| Mortgage-backed securities | 7.8% |

SANTA FE, N.M. — Pension assets at the New Mexico Public Employees Retirement Association grew 18.3% in the 12 months ended Sept. 30, to $1.471 billion from $1.243 billion.

Because of market volatility, assets declined 7.4% during October, to $1.382 billion as of Oct. 31.

During October, the fund pulled back its stock position, shifting assets into bonds and cash. By Oct. 31, the asset mix was 26% stocks, 47% bonds, 17% cash, with basically the same allocations in other asset classes.

**Equity managers:** Criterion and INVESCO.

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**Fixed-income managers:** Criterion; Fiduciary Trust International; Loomis, Sayles; and Wentworth, Hauser & Violich.

The custodian is Irving Trust; the investment consultant is Wilshire.

Key personnel overseeing the investment management of the fund are Judith K. Alderson, director; and Lorraine Ward, deputy.

## New York City Retirement Systems

| | ($ millions) |
|---|---|
| Total assets | 33,633 |
| Defined benefit | 32,104 |
| Defined contribution | 1,529 |
| Employer contributions | 1,830 |
| Benefit payments | 2,300 |
| Portfolio insurance | 221 |
| In-house assets: | |
| Fixed income | 590 |
| Short term | 799 |
| Passive investments: | |
| Indexed stocks | 9,731 |
| Indexed bonds | 18,308 |
| GICs | 1,014 |
| Alternative investments: | |
| International equities | 51 |
| Mortgages | 72 |
| Mortgage-backed securities | 4,900 |
| Asset mix: | |
| Stocks | 35.5% |
| Bonds | 43.5% |
| Cash equivalents | 2.5% |
| Mortgage-backed securities | 15.3% |
| GICs | 3.2% |

NEW YORK — Total employee benefit assets of the New York City Retirement Systems increased 9% in the year ended Sept. 30, to $33.633 billion from $30.839 billion. Defined benefit assets rose 7.9%, to $32.104 billion from $29.767 billion during the same period.

After the October market crash, assets totaled $31.475 billion, a drop of 6.4%.

Five retirement plans comprise the city retirement systems: the $13.803 billion New York City Employees' Retirement System; the $1.838 billion New York City Fire Department Pension Fund; the $5.042 billion New York City Police Department Pensions Fund; the $7.327 billion New York City Teachers' Retirement System; and the $504 million (as of Sept. 30) Board of Education Retirement System. The investments of the employees', police and fire funds are handled by the city comptroller's office. The comptroller also handles the fixed-income assets of the teachers' and board of education funds.

The teachers' system's variable annuity programs are composed of a tax-deferred annuity, Variable Fund A, which is invested in equities, and Variable Fund B, which is invested in guaranteed investment contracts. The Board of Education fund invests in Fund A.

As of Sept. 30, Fund A reported $4.179 billion in assets (including $72 million from the board of education fund) and Fund B, $1.014 billion. Reflecting its equity orientation, Fund A dropped 15.9% during October's market volatility, to $3.515 billion as of Oct. 31, but Fund B rose slightly, to $1.024 billion. The 1% gain was attributed to interest earned on GICs.

**NYC retirement equity advisers:** Bankers Trust; Batterymarch; Lazard Freres; Oppenheimer; Provident Capital; and Stein Roe.

**Teachers' equity managers:** Axe Core; Bankers Trust; Batterymarch; Concord Capital; John Levin; Mellon; Metropolitan Life; Prudential; Scudder, Stevens & Clark; Sound Shore; Trinity; and Wells Fargo.

**NYC retirement fixed-income advisers:** Bankers Trust; Bear Stearns; BEA; Chase Investors; Fiduciary Trust; Fischer, Francis, Trees & Watts; Investment Advisers; Kennedy Associates; Lehman Management; Lincoln Capital; Manufacturers Hanover; Mellon Bond Associates; Miller, Anderson, Sherrerd; PIMCO; Putnam; RCM; Smith Barney; State Street Bank; T. Rowe Price; Weiss, Peck & Greer; and Wells Fargo.

**Teachers' fixed-income/short-term managers:** Dimensional Fund; MacKay-Shields; Payden & Rygel; and Putnam Advisory.

**Teachers' GIC managers:** Bank of America; Metropolitan; New York Life; and Prudential.

Master custodian for the assets handled by the city comptroller's office is Citibank; the investment consultants are Callan Associates; SEI; and Rogers, Casey & Barksdale.

Master custodian for the teachers' and board of education assets is Irving Trust Co.; the investment consultant is Rogers, Casey & Barksdale.

Key personnel overseeing the investment management of the NYC fund are Beverly L. Hamilton, third deputy comptroller; William Paolino, bureau chief; John J. Burns, senior fixed-income analyst; and Lisa Malanchuk, senior equity analyst.

Key personnel overseeing assets of the teachers' fund are Donald S. Miller, executive director; Patrick J. Kiernan, deputy director-fiscal; and Diane R. Sisenwien, portfolio administrator.

## New York Life Insurance Co.

| | ($ millions) |
|---|---|
| Total assets* | 1,566 |
| Defined benefit | 1,366 |
| Defined contribution | 200 |
| Employer contributions | 3 |
| Benefit payments | 40 |

*P&I Age estimate

NEW YORK — *Pensions & Investment Age* estimates New York Life Insurance Co.'s employee benefit assets totaled $1.566 billion as of Sept. 30, an increase of 18.9% from the $1.317 billion reported a year earlier. Defined benefit assets rose 14.2% during the same period, to $1.366 billion from $1.196 billion, *P&I Age* estimates.

All investments are handled by New York Life and MacKay-Shields Financial.

Key personnel overseeing the investment management of the fund are Donald K. Ross, chairman and president, and George A.W. Bundschuh and Harry G. Hohn, vice chairmen.

## New York State & Local Retirement Systems

| | ($ millions) |
|---|---|
| Total assets | 38,747 |
| Defined benefit | 38,747 |
| Employer contributions | 1,388 |
| Benefit payments | 1,276 |
| In-house assets: | |
| Equities | 15,507 |
| Fixed income | 15,334 |
| Short term | 2,289 |
| Other | 420 |
| Passive investments: | |
| Indexed stocks | 15,806 |
| Alternative investments: | |
| Venture capital | 61 |
| LBOs | 218 |
| Real estate equity | 142 |
| Mortgages | 2,757 |
| Mortgage-backed securities | 2,540 |
| Asset mix: | |
| Stocks | 53.4% |
| Bonds | 25.9% |
| Cash equivalents | 5.9% |
| Real estate equity | 0.4% |
| Mortgages | 7.1% |
| Mortgage-backed securities | 6.5% |
| Other | 0.8% |

ALBANY, N.Y. — Pension assets of the New York State Common Retirement Fund rose 22.9% to $38.747 billion as of Sept. 30 from $31.533 billion a year earlier.

**Equity managers:** Alliance; Capital Guardian; Delaware; Equitable; Lazard Freres; Lord, Abbett; Miller, Anderson & Sherrerd; Oppenheimer; J&W Seligman; Shearson; and Wells Fargo.

**Real estate managers:** CIGNA; Corporate Property Investors; Eastdil; Goldman Sachs; JMB; LaSalle; J.W. O'Connor; and RREEF.

**LBO managers:** Kohlberg Kravis Roberts and Forstmann Little.

**Venture capital managers:** Bridge Capital; Crossroads; APA Excelsior; Montgomery Bridge; New York State Business Venture Partnership; Peregrine Ventures; U.S. Venture Partners.

The master trustee is Chase Manhattan; the investment consultants is Wilshire.

Key personnel overseeing the investment management of the fund are John E. Hull, deputy comptroller-investments and cash management; John J. O'Connor, chief investment officer; and William M. Barrett, director of equities and fixed-income investments.

C.F.O. salaries: April 18.

## New York State Teachers' Retirement System

| | ($ millions) |
|---|---|
| Total assets | 23,035 |
| Defined benefit | 23,035 |
| Employer contributions | 893 |
| Benefit payments | 732 |
| In-house assets: | |
| Equities | 10,437 |
| Fixed income | 7,149 |
| Short term | 494 |
| Other | 1,822 |
| Passive investments: | |
| Indexed stocks | 10,091 |
| Alternative investments: | |
| Venture capital | 36 |
| Private placements | 373 |
| Real estate equity | 20 |
| Mortgages | 1,669 |
| Mortgage-backed securities | 731 |
| Hedging devices: | |
| Stock options | Y |
| Asset mix: | |
| Stocks | 56% |
| Bonds | 29% |
| Cash equivalents | 2% |
| Real estate equity | 0.1% |
| Mortgages | 9.1% |
| Mortgage-backed securities | 3% |
| Venture capital/member loans | 0.8% |

ALBANY, N.Y. — Total assets of the New York State Teachers' Retirement System increased 13.8% as of Sept. 30, to $23.035 billion from $20.235 billion a year earlier. After the market drop of October, assets totaled $20.543 billion, a drop of 10.8%. The asset mix shifted to 50% stocks, 34.6% bonds, 9.5% mortgages and the other asset classes unchanged.

**Equity managers:** Sanford C. Bernstein; Beutel Goodman; General American; Glickenhaus; Lehman Management; Manufacturers Hanover; and Oppenheimer.

**Fixed-income manager:** Sanford C. Bernstein.

**Real estate managers:** Aetna; Equitable; Goldman, Sachs; and Prudential.

**Venture capital managers:** Mesirow Capital Partners; Excelsior II; New York State Business Venture; and Norstar Venture.

The master custodian is Bankers Trust; the investment consultant is Buck.

Key personnel overseeing the investment management of the fund are Harold N. Langlitz, executive director; Edward J. Reno Jr., securities investment officer; and Lowell A. Blom, mortgage officer.

## North American Philips

| | ($ millions) |
|---|---|
| Total assets | 1,347 |
| Defined benefit | 1,086 |
| Profit-sharing | 5 |
| Thrift or savings/401(k) | 256 |
| Employer contributions | 5 |
| Benefit payments | 27 |
| Passive investments: | |
| Indexed stocks | 49 |
| Dedicated/immunized | 93 |
| Alternative investments: | |
| International equity | 87 |
| Real estate equity | 86 |
| Mortgage-backed securities | 160 |
| Hedging devices: | |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 71% |
| Bonds | 2% |
| Cash equivalents | 4% |
| Real estate equity | 8% |
| Mortgage-backed securities | 15% |

NEW YORK — The total benefit assets at North American Philips increased 28.5% to $1.347 billion from $1.048 billion for the 12 months ended Sept. 30. Because of market volatility, assets fell 3.5% to $1.3 billion as of Oct. 31. The asset mix as of Oct. 31 was 66% stocks, 4% bonds, 5% cash equivalents, 10% real estate equity and 15% mortgage-backed securities, according to Kathy Pino, pension finance administrator.

**Equity managers:** Bankers Trust; Barrow, Hanley, Mewhinney & Strauss; Delaware; Franklin; Lehman Management; Lord, Abbett; Mellon Pictet; Morgan Grenfell; Nicholas-Applegate; Oechsle; Reich & Tang; Rosenberg; and State Street.

**Fixed-income managers:** Lincoln Capital and PIMCO.

**Real estate managers:** Coldwell Banker; Equitable; PMReality; and TCW.

The master trustee is Bankers Trust.

Key personnel overseeing the investment management of the fund are C.P. Dunn, director-pension finance and investment and Ms. Pino.

## North Carolina Retirement Systems

| | ($ millions) |
|---|---|
| Total assets | 12,446 |
| Defined benefit | 12,446 |
| Employer contributions | 517 |
| Benefit payments | 498 |
| In-house assets: | |
| Fixed income | 9,094 |
| Alternative investments: | |
| Private placements | 286 |
| Real estate | 170 |
| Mortgage-backed securities | 1,385 |
| Hedging devices: | |
| Stock options | Y |
| Asset mix: | |
| Stocks | 23% |
| Bonds | 61% |
| Real estate | 1% |
| Mortgage-backed securities | 15% |

RALEIGH, N.C. — Total assets of the North Carolina Retirement Systems rose 24.4% to $12.446 billion as of Sept. 30, 1987, from the $10.003 billion (book value) reported as of June 30, 1986.

As a result of the market crash, assets dropped only 1.9%, to $12.115 billion, as of Oct. 31. The asset allocation has not been changed as a result of the drop.

**Equity advisers:** Alliance (discretionary); First Citizens Bank; First Union National Bank; NCNB; Thorndike Doran Paine & Lewis; and First Wachovia.

**Real estate managers:** Aetna; CIGNA Capital; Goldman, Sachs; NCNB; Security Capital; and First Wachovia.

The master custodian is Bank of New York.

Key personnel overseeing the investment management of the fund are Harlan E. Boyles, state treasurer, and C. Douglas Chappell, deputy treasurer/director-investment and banking division.

## Northrop Corp.

| | ($ millions) |
|---|---|
| Total assets | 3,402 |
| Defined benefit | 2,519 |
| Defined contribution | 42 |
| Profit-sharing/401(k) | 841 |
| Employer contributions | 30 |
| Benefit payments | 48 |
| Asset mix: | |
| Stocks | 70% |
| Bonds | 22% |
| Cash equivalents | 8% |

LOS ANGELES — Northrop Corp. had $3.402 billion in total employee benefit assets as of Sept. 30, an increase of 25.9% from $2.702 billion the previous year. Defined benefit assets increased 26.7% to $2.519 billion as of Sept. 30, from $1.988 billion the previous year.

Because of market volatility, however, defined benefit assets declined 16.7% to $2.099 billion as of Oct. 31. The asset mix changed slightly as of Nov. 1, to 64% stocks, 26% fixed income and 10% cash.

**Equity managers:** Capital Guardian; Forstmann-Leff; Jennison; Putnam Advisory; RCM; and State Street Research.

**Fixed-income managers:** Fischer, Francis, Trees & Watts and Jennison.

The master trustee is Bankers Trust.

The key person overseeing the investment management of the fund is Richard B. Lohrer, vice president-trust investments.

## NYNEX Corp.

| | ($ millions) |
|---|---|
| Total assets | 14,336 |
| Defined benefit | 11,966 |
| Defined contribution | 2,370 |
| Employer contributions | 49 |
| Benefit payments | 436 |
| In-house assets: | |
| Fixed income | 201 |
| Passive investments: | |
| Indexed stocks | 4,817 |
| Indexed bonds | 1,076 |
| Alternative investments: | |
| International equities | 203 |
| Venture capital | 24 |
| Real estate equity | 732 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 63% |
| Bonds | 31% |
| Real estate equity | 6% |

NEW YORK — NYNEX Corp.'s employee benefit assets rose 19.8% in the year ended Sept. 30, to $14.336 billion from $11.962 billion. Defined benefit assets in the same period rose 18.6% to $11.966 billion from $10.089 billion.

**Equity managers:** American National Bank; Barrow Hanley Mewhinney & Strauss; Batterymarch; Capital Guardian International; Daniel Breen; Dimensional Fund; Fidelity Management Trust; Franklin Portfolio; Manufacturers Hanover; McCowan; Mellon-Pictet; Trinity; TCW; and Wells Fargo Investment.

**Fixed-income managers:** Boston Co.; Brown Brothers Harriman; Jennison; John Hancock; Lincoln Capital; Manufacturers Hanover; Massachusetts Financial; Miller Anderson Sherrerd; Standish Ayer & Wood; State Street Research; and Western Asset Management.

**Real estate managers:** Aldrich Eastman & Waltch; Corporate Property Investors; Heitman; and McMahan.

The master trustee is Mellon Bank.

Key personnel overseeing the investment management of the fund are L.R. Smart, corporate director-finance, and J.E. Clines, director-investment management.

O

## Police & Firemen's Disability & Pension Fund of Ohio

| | ($ millions) |
|---|---|
| Total assets | 2,502 |
| Defined benefit | 2,502 |
| Employer contributions | 156 |
| Benefit payments | 201 |
| In-house assets: | |
| Fixed income | 1,132 |
| Short term | 355 |
| Passive investments: | |
| Indexed stocks | 272 |
| Alternative investments: | |
| Venture capital | 12 |
| Private placements | 1 |
| Real estate equity | 108 |
| Mortgages | 10 |
| Mortgage-backed securities | 221 |
| Asset mix: | |
| Stocks | 35.4% |
| Bonds | 36.4% |
| Cash equivalents | 14.2% |
| Real estate equity | 4.3% |
| Mortgages | 0.4% |
| Mortgage-backed securities | 8.8% |
| Venture capital | 0.5% |

COLUMBUS, Ohio — The Police & Firemen's Disability & Pension Fund of Ohio's total benefit assets increased 11.8% to $2.502 billion from $2.237 billion for the year ended Sept. 30.

Total assets fell 5.8% to $2.358 billion from Sept. 30 through Oct. 31, according to a spokeswoman for the fund.

**Equity managers:** Axe Core; Bankers Trust; Duff & Phelps; Society National Bank; Travelers Investment; and Value Line.

**Real estate managers:** Schroder and Trident/Meyer.

**Venture capital managers:** Cardinal Capital and Primus.

The master custodian is Bankers Trust. SEI is the investment management consulting firm for stocks and bonds; Townsend Group is the real estate consultant.

Overseeing the investment management of the fund is Theodore G. Hall, investment manager.

## Ohio Public Employees' Retirement System

| | ($ millions) |
|---|---|
| Total assets | 14,985 |
| Defined benefit | 14,985 |
| Employer contributions | 650 |
| Benefit payments | 653 |
| In-house assets: | |
| Equities | 4,408 |
| Fixed income | 9,244 |
| Short term | 1,106 |
| Other | 35 |
| Alternative investments: | |
| Venture capital | 35 |
| Real estate equity | 192 |
| Mortgage-backed securities | 6,000 |
| Asset mix: | |
| Stocks | 29.5% |
| Bonds | 21.0% |
| Cash equivalents | 7.4% |
| Real estate equity | 1.2% |

| | |
|---|---|
| Mortgage-backed securities | 49% |
| Venture capital | 0.2% |

COLUMBUS, Ohio — Assets of the Ohio Public Employees' Retirement System grew 10.4% to $14.985 billion as of Sept. 30 from $13.567 billion a year earlier. In the October market drop, the assets declined 4.6%, to roughly $14.3 billion as of Oct. 31.

**Equity adviser:** Value Line.

**Real estate managers:** CIGNA; NCNB; Rothschild; Security Capital; and Wells Fargo.

The master custodian is the state treasurer.

The key person overseeing the investment management of the fund is Robert A. McLaughlin, investment officer.

## School Employees Retirement System of Ohio

| | ($ millions) |
|---|---|
| Total assets | 2,409 |
| Defined benefit | 2,409 |
| Employer contributions | na |
| Benefit payments | na |
| In-house assets: | |
| Equities | 205 |
| Fixed income | 827 |
| Short term | 165 |
| Other | 249 |
| Passive investments: | |
| Indexed stocks | 854 |
| Alternative investments: | |
| Venture capital | 19 |
| Real estate equity | 262 |
| Mortgages | 76 |
| Mortgage-backed securities | 372 |
| Hedging devices: | |
| Stock options | Y |
| Asset mix: | |
| Stocks | 33.7% |
| Bonds | 23.4% |
| Cash equivalents | 8.1% |
| Real estate equity | 11.6% |
| Mortgages | 3.4% |
| Mortgage-backed securities | 18.9% |
| Venture capital | 0.9% |

COLUMBUS, Ohio — Assets of the School Employees Retirement System of Ohio increased 29.9% to $2.409 billion as of Sept. 30 from $1.854 billion a year earlier.

**Equity managers:** Mellon Capital.

The investment consultant is Ronald Karp Associates.

Paul M. Kubinsky, director-investments, oversees investment management of the fund.

## State Teachers Retirement System of Ohio

| | ($ millions) |
|---|---|
| Total assets | 14,821 |
| Defined benefit | 14,821 |
| Employer contributions | 625 |
| Benefit payments | 735 |
| In-house assets: | |
| Equities | 5,660 |
| Fixed income | 6,490 |
| Short term | 1,059 |
| Other | 1,612 |
| Passive investments: | |
| Dedicated/immunized | 200 |
| Alternative investments: | |
| Venture capital | 20 |
| Private placements | 13 |
| Real estate equity | 1,588 |
| Mortgages | 920 |
| Mortgage-backed securities | 1,594 |
| Hedging devices: | |
| Stock options | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 38% |
| Bonds | 27% |
| Cash equivalents | 7% |
| Real estate equity | 11% |
| Mortgages | 6% |
| Mortgage-backed securities | 11% |

COLUMBUS, Ohio — Assets of the State Teachers Retirement System of Ohio increased 18.7% to $14.821 billion from $12.484 billion in the 12 months ended Sept. 30. Fund officials declined to say how the October market drop affected the assets.

**Equity and bond adviser:** Thorndike, Doran, Paine & Lewis.

**Real estate adviser:** Thomas Karsten Associates.

The master custodian is the state treasurer.

Key personnel overseeing the investment management of the fund are C. James Grothaus, executive director; Stephen A. Mitchell, assistant executive director-investments; and Daniel M. Szente, assistant director-investments.

Mutual funds: Aug. 8.

## Oklahoma Teachers' Retirement System

| | ($ millions) |
|---|---|
| Total assets | 1,735 |
| Defined benefit | 1,735 |
| Employer contributions | 125 |
| Benefit payments | 200 |
| In-house assets: | |
| Short term | 210 |
| Alternative investments: | |
| Mortgage-backed securities | 2 |
| Asset mix: | |
| Stocks | 19.5% |
| Bonds | 70.5% |
| Cash equivalents | 9% |
| Mortgage-backed securities | 1% |

OKLAHOMA CITY — Total assets of the Oklahoma teachers' fund increased by 9.1% to $1.735 billion from $1.59 billion for the year ended Sept. 30.

Total assets were approximately $1.67 billion on Nov. 1, a decline of 3.7% from Sept. 30.

**Equity managers:** Capital Advisors; First Investment; Tom Johnson Investment; Lazard Asset Management; Liberty National Bank; Bank of Oklahoma.

**Fixed-income managers:** First Investment; Tom Johnson; Liberty National; Bank of Oklahoma; Siebel Asset.

The master custodian is First Interstate Bank, Oklahoma; the investment consultant is Kidder, Peabody.

Key personnel overseeing the investment management of the fund are Tommy C. Beavers, executive secretary; Jo Witt, investment director; Bill Puckett, investment officer.

## Central Pension Fund of the International Union of Operating Engineers and Participating Employers

| | ($ millions) |
|---|---|
| Total assets | 1,718 |
| Defined benefit | 1,718 |
| Employer contributions | 96 |
| Benefit payments | 72 |
| Passive investments: | |
| Indexed stocks | 418 |
| Indexed bonds | 503 |
| GICs | 111 |
| Alternative investments: | |
| Mortgages | 103 |
| Mortgage-backed securities | 132 |
| Hedging devices: | |
| Stock options | Y |
| Asset mix: | |
| Stocks | 31.3 |
| Bonds | 38.5% |
| Cash equivalents | 14.8% |
| Mortgages | 9% |
| GICs | 6.4% |

WASHINGTON — Total benefit assets and pension assets as of Sept. 30 increased by 13% to $1.718 billion. As a result of the market drop and other factors, total assets as of Nov. 1 were $1.637 billion, a decrease of 4.7%. The fund's equity investment decreased by 5.5% as a result of the drop, but the group plans to keep its percentage allocation in stocks constant by buying more equities.

**Equity managers:** Analytic Investment Management; Batterymarch; S.C. Bernstein; Concord; and Wells Fargo.

**Fixed-income managers:** Criterion; Loomis Sayles; Lowe Brockenbough; STW; Tiernye and Tattersall; and Wells Fargo.

**Real estate manager:** Aldrich Eastman and Waltch.

The master custodian is State Street Bank; the investment consultant is Ennis, Knupp.

Key personnel overseeing the investment management of the fund are Jack E. Johnson, director of finance, and Robert E. Birch, assistant to the director of finance.

## Oregon Public Employes Retirement System

| | ($ millions) |
|---|---|
| Total assets | 8,789 |
| Defined benefit assets | 8,789 |
| Employer contributions | 410 |
| Benefit payments | 280 |
| In-house assets: | |
| Fixed income | 2,500 |
| Alternative investments: | |
| International equities | 766 |
| Venture capital | 67 |
| LBOs | 262 |
| Real estate equity | 277 |
| Mortgages | 425 |
| Mortgage-backed securities | 165 |


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PROFILES

| | |
|---|---|
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 58% |
| Bonds | 26% |
| Cash equivalents | 1% |
| Real estate equity | 4% |
| Mortgages | 5% |
| Mortgage-backed securities | 1% |
| Venture capital | 1% |
| LBOs | 4% |

SALEM, Ore. — The benefit assets of the Oregon Public Employes Retirement System increased 34.8% in the year ended Sept. 30, to $8.789 billion from $6.522 billion.

Because of the market conditions in October, the assets decreased 12.8% to $7.667 billion as of Oct. 31.

**Equity managers** (Domestic): Atalanta/Sosnoff; Batterymarch; BEA; Columbia; Cutler; Franklin Asset; Froley, Revy; General American; Harris Associates; Hotchkis & Wiley; Olympic; Pinnacle; Quest Advisory; RCM; Fayez Sarofim; George B. Springman; Thompson-Rubinstein; and William D. Witter.

(International): ABD; Cursitor-Eaton; Daiwa; Globe Finlay; Matushka Moser; Nomura; Rowe Price-Fleming; and Wertheim Philippe.

**Real estate manager:** Alex. Brown.

**LBO manager:** Kohlberg Kravis Roberts.

The master custodian for fixed income is Chase, and for equities, First Interstate of Oregon. The investment consultants are Frank Russell and Wilshire.

Key personnel overseeing the investment management of the fund are James C. George, investment manager; Bill Unverzagt, senior investment officer-fixed; Jim Yasutome, senior investment officer-short term; and Terry Canby, senior investment officer-real estate.

## Owens-Illinois Inc.

| ($ millions) | |
|---|---|
| Total assets | 2,230 |
| Defined benefit | 1,950 |
| Defined contribution | 280 |
| Employer contributions | na |
| Benefit payments | na |
| In-house assets: | |
| Equities | 170 |
| Alternative investments: | |
| International equities | 330 |
| International bonds | 66 |
| Real estate equity | 195 |
| Asset mix: | |
| Stocks | 55% |
| Bonds | 13% |
| Cash equivalents | 4% |
| Real estate equity | 10% |
| International | 18% |

TOLEDO, Ohio — Owens-Illinois Inc.'s total employee benefit assets increased 18.9% to $2.23 billion as of Sept. 30 from $1.875 billion a year earlier. Defined benefit assets alone increased 20% during the 12 months, to $1.95 billion from $1.625 billion.

According to Money Market Directory, the managers of the assets are as follows.

**Equity managers** (Domestic): Dimensional; Harbor Capital Advisors; Jennison; Lazard Freres; State Street Bank; and Wright.

(International): Grantham, Mayo, Van Otterloo, Marsh & Cunningham, Morgan Grenfell.

**Fixed-income managers** (Domestic): Jennison; Lazard; PIMCO; State Street Bank; and Toledo Trust.

(International): Julius Baer.

**Real estate managers:** Aldrich, Eastman & Waltch; American Agricultural; Boston Co.; and RREEF.

**Venture capital manager:** Emerging Growth Partners.

**GIC managers:** Capitoline; Metropolitan Life; Prudential Asset; and State Mutual of America.

**Cash manager:** First Wachovia.

**Oil & gas manager:** RPI Institutional.

The master trustee is First Wachovia; the investment consultant is Richards & Tierney.

Key personnel overseeing the investment management of the fund are R.W. Lock, vice president, treasurer and assistant chief financial officer, and Ronald C. Boller, director-benefit finance.

P

## Pacific Gas and Electric Co.

| ($ millions) | |
|---|---|
| Total assets | 3,560 |
| Defined benefit | 2,624 |
| Defined contribution | 936 |
| Employer contributions | 146 |
| Benefit payments | 118 |
| Passive investments: | |
| Indexed stocks | 378 |
| GICs | 24 |
| Alternative investments: | |
| International equities | 179 |
| Real estate equity | 161 |
| Asset mix: | |
| Stocks | 74% |
| Bonds | 15% |
| Cash equivalents | 1% |
| Real estate equity | 6% |
| GICs | 1% |
| Annuities | 3% |

SAN FRANCISCO — As of Sept. 30, Pacific Gas and Electric Co.'s total employee benefit assets increased 8.7% to $3.56 billion from $3.275 billion a year earlier. Defined benefit assets increased 26.5% during the same period, to $2.624 billion from $2.075 billion.

Because of the market volatility during October, the defined benefit assets fell 16.2% to $2.2 billion, according to Peter F. Corippo, senior financial analyst.

**Equity managers:** American Express Asset; Barrow Hanley Mewhinney & Strauss; Arnhold and S. Bleichroeder; Capital Guardian; Dodge & Cox; Geewax, Terker; Jundt/Capen; Loomis, Sayles; McCowan; Metropolitan Life; Miller Anderson Sherrerd; Oechsle; Olympic; Prudential Asset; RCM; and Wells Fargo Investment.

**Fixed-income managers:** Sanford C. Bernstein; Fischer Francis Trees & Watts; Miller Anderson Sherrerd; and Prudential Asset.

**Real estate managers:** Corporate Property Investors; JMB; Metropolitan Life; Prudential; RREEF; and TCW.

**GIC manager:** Metropolitan Life.

The master trustee is State Street Bank; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Sunny Oberoi, director-pension fund management, and Peter K. Corippo, senior financial analyst.

## Pacific Lighting Corp.

| ($ millions) | |
|---|---|
| Total assets | 1,341 |
| Defined benefit | 855 |
| 401(k) | 486 |
| Employer contributions | 40 |
| Benefit payments | 28 |
| Passive investments: | |
| Indexed stocks | 258 |
| GICs | 24 |
| Alternative investments: | |
| International equities | 46 |
| Venture capital | 14 |
| Real estate equity | 58 |
| Mortgages | 12 |
| Asset mix: | |
| Stocks | 69% |
| Bonds | 13% |
| Cash equivalents | 7% |
| Real estate equity | 7% |
| Mortgages | 2% |
| GICs | 2% |

LOS ANGELES — Pacific Lighting Corp.'s total benefit assets increased 22.9% to $1.341 billion from $1.091 billion during the year ended Sept. 30. Because of the market volatility during October, total assets dropped 14.6% to $1.145 billion as of Oct. 31, according to Thomas D. Rollinger, assistant treasurer at the fund.

**Equity managers:** Cashman Farrell; Daiwa; Dimensional; Fidelity Management Trust; Jennison; Morgan Grenfell; Nicholas-Applegate; Nikko; Olympic Capital; Scudder Stevens & Clark; Wall Street Associates; and Wells Fargo.

**Fixed-income managers:** Aetna; Fiduciary Trust; and MacKay.

**Real estate managers:** Aetna; Copley; and Heitman.

**GIC manager:** Aetna.

The master trustee is Bank of America; the investment consultant is Wilshire Associates.

Mr. Rollinger oversees investment management of the fund.

## Pacific Telesis Group

| ($ millions) | |
|---|---|
| Total assets* | 9,867 |
| Defined benefit | 8,975 |
| Thrift or savings/401(k) | 892 |

*From Money Market Directory

SAN FRANCISCO — Pacific Telesis Group's employee benefit assets rose 16.1% to $9.867 billion from the $8.5 billion reported Sept. 30, 1986, according to the Money Market Directory, which provided the most recent figures and listing of managers.

**Equity managers:** (Domestic) Delphi; Dodge & Cox; Hotchkis and Wiley; IDS Advisory; in-house; Jundt/Capen; Lord Abbett; Morgan Grenfell Capital; Pilgrim Baxter Greig; RCM Capital Management; Sit Investment; Thompson Siegel & Walmsley; United Capital Management; and Wellington Management.

(International): Capital Guardian; Fidelity International; Morgan Grenfell Investment Services; N.M. Rothschild.

**Bond managers:** Dodge & Cox; Fischer Francis Trees & Watts; in-house; Pacific Investment Management; Solomon Asset Management; and Western Asset Management.

**Real estate managers:** Copley; Jones Lang Wootton; LaSalle; and TCW.

**Cash and short-term manager:** Discount Corp. of New York.

**Other managers:** Mellon Capital.

The master trustee is Bank of America; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are Jeffrey L. Winter, manager-pension fund, and Honor R. Fetherston, manager-investment administration and real estate.

## Pan American World Airways Inc.

| ($ millions) | |
|---|---|
| Total assets | 1,445 |
| Defined benefit | 610 |
| Defined contribution | 835 |
| Employer contributions | 120 |
| Benefit payments | 95 |
| Passive investments: | |
| Indexed stocks | 32 |
| Alternative investments: | |
| International equities | 45 |
| Asset mix: | |
| Stocks | 9% |
| Bonds | 15% |
| Cash equivalents | 3% |
| IPGs | 73% |

NEW YORK — Pan American World Airways Inc.'s retirement assets increased 10.6% to $1.445 billion from $1.307 billion during the 12-month period ended Sept. 30. Defined benefit assets grew 11.7% during the same period, to $610 million from $546 million.

**Equity managers:** (Domestic) Ardsley Partners; Bankers Trust; Delaware; GAMCO; Lord, Abbett; Nicholas-Applegate; Putnam; Reich & Tang; TCW; and Waite & Correnti.

(International) Alliance Capital and Worldinvest.

**Fixed income managers:** Bankers Trust; Fischer, Francis, Trees & Watts;


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Mellon Bond; and Putnam.

**GIC managers:** CNA; John Hancock; New England Life; and Travelers.

**IPG managers:** Connecticut General and John Hancock.

**Global multiasset manager:** First Chicago.

The master trustee is Bankers Trust; the investment consultant is Hamilton & Co.

Key personnel overseeing the investment management of the fund are C.J. David Davies, senior vice president, chief financial officer and treasurer; Carl F. Stillwell, system director-benefits; and George J. Mehm Jr., manager-pensions/financial.

## J.C. Penney Co. Inc.

| | ($ millions) |
|---|---|
| Total assets* | 3,212 |
| Defined benefit | 1,301 |
| Thrift or savings/401(k) | 1,911 |
| Employer contributions | NA |
| Benefit payments | NA |

*P&I Age estimate

NEW YORK — J.C. Penney's total assets grew an 21% during the nine months ended Sept. 30, according to *Pensions & Investment Age* estimates.

**Managers:** (according to Money Market Directory) Batterymarch; Fidelity International; Geo Capital; Grantham, Mayo, Van Otterloo; Lieber; Miller, Anderson & Sherrerd; RCM Capital; RREEF; Tallasi; Robert Torray; TCW.

Key personnel overseeing the investment management of the fund are Donald A. McKay, vice president-treasurer and Thomas A. Clerkin, manager of financial support.

## Pennsylvania Public School Employes' Retirement System

| | ($ millions) |
|---|---|
| Total assets | 12,021 |
| Defined benefit | 12,021 |
| Employer contributions | 850 |
| Benefit payments | 608 |
| In-house assets: | |
| Fixed income | 270 |
| Passive investments: | |
| Indexed stocks | 1,369 |
| Indexed bonds | 1,699 |
| Alternative investments: | |
| Venture capital | 42 |
| Real estate equity | 508 |
| Mortgages | 457 |
| Mortgage-backed securities | 685 |
| Hedging devices: | |
| Stock options | Y |
| Asset mix: | |
| Stocks | 38.5% |
| Bonds | 33.2% |
| Cash equivalents | 14.2% |
| Real estate equity | 4.2% |
| Mortgages | 3.8% |
| Mortgage-backed securities | 5.7% |
| Venture capital | 0.4% |

HARRISBURG, Pa. — Total pension assets of the fund increased 19% as of Sept. 30. Total assets after the market drop of October were $11,177 million. The asset mix following the crash was 33% equities; 37% fixed income; 15% cash; 5% real estate; 4% mortgages; 6% mortgage-backed securities; and 0.38% venture capital.

**Equity managers:** Bankers Trust; Cashman & Farrell; Delaware; Dreman; Mellon Bank; Miller Anderson Sherrerd; Oppenheimer; Provident Capital; and Evaluation Associates.

**Fixed-income managers:** Criterion; Glenmede; Loomis Sayles; Mellon Bank; Miller Anderson Sherrerd; Pittsburgh National Bank; PIMCO; and Putnam.

**Real estate managers:** Fidelity Bank and Jones Lang Wootton.

**Options managers:** Webster and Oppenheimer Options.

**Venture capital managers:** NEPA; Trivest; and Century IV.

The master custodian is First Pennsylvania Bank; the investment consultant is Evaluation Associates.

Key personnel overseeing the investment management of the fund are Samuel A. McCullough, chairman of the board; James A. Perry, executive director; and Clay B. Mansfield, chief investment officer.

Profiles of the leading international investment advisers will appear June 27.

## Pennsylvania State Employes' Retirement System

| | ($ millions) |
|---|---|
| Total assets | 7,965 |
| Defined benefit | 7,965 |
| Employer contributions | 332 |
| Benefit payments | 526 |
| Passive investments: | |
| Indexed stocks | 1,899 |
| Indexed bonds | 637 |
| Alternative investments: | |
| International bonds | 12 |
| Venture capital | 52 |
| Real estate equity | 392 |
| Mortgages | 484 |
| Mortgage-backed securities | 229 |
| Asset mix: | |
| Stocks | 50.2% |
| Bonds | 29.8% |
| Cash equivalents | 5.5% |
| Real estate equity | 4.9% |
| Mortgages | 8.9% |
| Venture capital | 0.7% |

HARRISBURG, Pa. — The market value of the Pennsylvania State Employes' Retirement System's total pension assets rose to $7.965 billion from $6.73 billion for the year ended Sept. 30, an increase of 18.4%.

The market value of the fund's assets dropped 10.2% to $7.152 billion Oct. 30.

**Equity managers:** Fred Alger; Alliance; Barrow Hanley; First Pennsylvania Bank; Geewax Tucker; Glickenhaus; McGlinn; Mellon; Pilgrim, Baxter, Greig; Trinity; and Wells Fargo.

**Fixed-income managers:** Delaware; Fidelity; W.R. Huff; Mellon; Miller, Andersen & Sherrerd; and Payden & Rygel.

**Real estate managers:** Aetna; Corporate Property Investors; F.I.A. Associates; John Hancock; JMB; Prudential; and Security Capital.

**Venture capital managers:** APA/Fostin and PA Venture Capital.

The master custodians are the state treasurer and First Pennsylvania Bank; the investment management consultants are Wilshire and Ronald Karp.

Key personnel overseeing the investment management of the fund are Kenneth G. Mertz II, chief investment officer; Karen Nicely, assistant chief investment officer; and David D. Burnett, investment analyst.

## City of Philadelphia Board of Pensions & Retirement

| | ($ millions) |
|---|---|
| Total assets | 1,587 |
| Defined benefit | 1,587 |
| Employer contributions | 150 |
| Benefit payments | 198 |
| In-house assets: | |
| Short term | 113 |
| Alternative investments: | |
| Venture capital | 3 |
| Real estate equity | 27 |
| Mortgage-backed securities | 3 |
| Asset mix: | |
| Stocks | 46.2% |
| Bonds | 42.7% |
| Cash equivalents | 7.2% |
| Real estate equity | 1.7% |
| Mortgage-backed securities | 0.2% |
| Venture capital | 0.2% |
| CDs & subordinated notes | 1.8% |

PHILADELPHIA — The Philadelphia Municipal Pension Fund's assets increased 16.9% to $1.587 billion from $1.358 billion during the year ended Sept. 30. Assets declined 9.2% during October, dropping to $1.44 billion.

Stocks dropped to 40.4% of assets during the month from 46.2%. Meanwhile, bonds rose to 48.4% from 42.7%, while other asset classes changed marginally.

**Equity managers:** Atalanta/Sosnoff; Delaware; Eaton Vance; Kemper Financial; Miller, Anderson & Sherrerd; and Provident Capital.

**Fixed-income managers:** Criterion; Drexel Burnham Lambert; Lehman; and Wentworth, Hauser & Violich.

**Real estate managers:** Copley; Dover Pension Investors; Hall Venture; JMB; MIG Realty; and Security Capital.

**Venture capital managers:** Genesis Seed Fund; and Meridian Venture Partners.

The master custodian is First Pennsylvania; the investment consultants are SEI and Frank Russell.

Key personnel overseeing the investment management of the fund are Peter Crescitelli, executive director;

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John Fuller, deputy director of finance; and Margaret Samkavitz, investment analyst.

## Philip Morris Inc.

| | ($ millions) |
|---|---|
| Total assets | 1,892 |
| Defined benefit assets | 1,214 |
| Profit-sharing | 678 |
| Employer contributions | 86 |
| Benefit payments | 32 |
| Alternative investments: | |
| International equities | 134 |
| Real estate equity | 8 |
| Hedging devices: | |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 67% |
| Bonds | 21% |
| Cash equivalents | 11% |
| Real estate equity | 1% |

NEW YORK — Total benefit assets of Philip Morris Inc. increased 24.2% to $1.892 billion as of Sept. 30, 1987, from $1.524 billion as of June 30, 1986. Defined benefit assets increased 18.7% during the same period to $1.214 billion from $1.023 billion.

**Equity managers** (Domestic): Sanford Bernstein; Glickenhaus; Miller, Anderson & Sherrerd; Rosenberg; and State Street Research.

(International): Morgan Grenfell.

**Fixed-income managers:** Scudder, Stevens & Clark and State Street Bank.

**Real estate manager:** JMB.

The master trustee is State Street Bank.

Key personnel overseeing the investment management of the fund are Herbert Millington, deputy treasurer; Mary Lee Calimano, manager-financial services; and John Pecora, financial analyst.

## Plumbers, National Headquarters

| | ($ millions) |
|---|---|
| Total assets* | 1,598 |
| Defined benefit | 1,598 |
| Employer contributions | 57 |

*From Money Market Directory

WASHINGTON — Total benefit assets of the Plumbers, National Headquarters are $1.598 billion, according to information from the Money Market Directory.

**Managers:** Capital Management; ASB Capital Management.

The master custodian is Capital Management.

Key personnel overseeing the investment management of the fund are Marvin Boede, general president; Charles J. Habig, secretary and treasurer, and Ernest Soderstrom and Marsha Pugh, administrators.

## PPG Industries Inc.

| | ($ millions) |
|---|---|
| Total assets* | 1,800 |
| Employer contributions | na |
| Benefit payments | na |

*P&I Age estimate

PITTSBURGH — As of Sept. 30, *Pensions & Investment Age* estimates PPG Industries Inc.'s total employee benefit assets increased 22% to $1.8 billion from $1.476 billion a year earlier.

The estimate was based on the fund's Sept. 30, 1986, asset mix of 49% stocks; 44% bonds; 6% cash equivalents; and 1% GICs.

According to the Money Market Directory, the investment managers are as follows:

**Managers:** BEA Associates; Boston Co. Institutional Investors; Boston Co. Structured Investment Products; Fidelity Management Trust; Leland O'Brien Rubinstein; Lipper Analytical Services; Lowry, Raclin, Harrell & Howerdd; Minton/Newbold's; Morgan Grenfell; Neuberger & Berman; Phoenix; Reich & Tang; Smith Barney; Travelers.

The master custodian is Mellon Bank; the investment consultant is Lowry, Raclin, Harrell & Howerdd.

Overseeing the investment management of the fund is Charles Elmer, manager-pension investment administration.

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The real estate directory will be published Sept. 19.

## The Board of Pensions of the Presbyterian Church (U.S.A.)

| | ($ millions) |
|---|---|
| Total assets | 2,122 |
| Defined benefit | 2,122 |
| Employer contributions | 100 |
| Benefit payments | 90 |
| In-house assets: | |
| Short term | 10 |
| Passive investments: | |
| Indexed stocks | 559 |
| Indexed bonds | 167 |
| GICs | 221 |
| Alternative investments: | |
| International equities | 91 |
| International bonds | 5 |
| Venture capital | na |
| Real estate equity | 29 |
| Asset mix: | |
| Stocks | 53.1% |
| Bonds | 27.6% |
| Cash equivalents | 7.6% |
| Real estate equity | 1.3% |
| GICs | 10.4% |

PHILADELPHIA — Total pension assets increased 21.3% to $2.122 billion from $1.75 billion for the year ended Sept. 30. Assets totaled $1.883 billion after the market drop of October, a decrease of 11.3%. Equities dropped to 44.3% of total assets after the crash while cash and bonds increased purely by virtue of the drop in equities — not through trading activity by the fund.

**Equity managers:** (Domestic) Alger; J.P. Morgan; TRUSCO; and Wells Fargo. (International) Templeton.

**Fixed-income managers:** (Domestic) CoreStates; J.P. Morgan; TRUSCO; and Wells Fargo. (International) J.P. Morgan.

**Real estate manager:** CIGNA.

**GIC managers:** Aetna; Bankers Life; Hancock; Mutual Life of New York; Transamerica; and Travelers.

The master trustee is The Mellon Bank; the investment consultant is Callan Associates Inc.

The key person overseeing the investment management of the fund is Wm. Irwin Arbuckle II, vice president-investments and treasurer.

## Procter & Gamble Co.

| | ($ millions) |
|---|---|
| Total assets* | 3,580 |
| Defined benefit | 168 |
| Profit-sharing | 3,331 |
| 401(k) | 81 |
| Employer contributions | 193 |
| Benefit payments | 221 |
| *as of June 30, 1987 | |
| In-house assets: | |
| Equities | 2,237 |
| Fixed income | 876 |
| Short term | 218 |
| Passive investments: | |
| Indexed stocks | 47.5 |
| Indexed bonds | 44.4 |
| GICs | 938.4 |
| Asset mix: | |
| Stocks | 67% |
| Bonds | 1% |
| Cash equivalents | 6% |
| GICs | 26% |

CINCINNATI — Procter & Gamble Co.'s total employee benefit assets rose 20% in the year ended June 30, 1987, to $3.58 billion, from $2.98 billion.

Total employee benefit assets dropped fund 8% to $3.29 billion as of Oct. 31, as a result of market volatility. During the four months since June, the defined benefit assets fell 10.7% to $150.4 million, while the profit-sharing assets fell 8% to $3.06 billion. Broken down, the profit-sharing asset mix, as of Oct. 31, was $2.03 billion in equities, $904 million in fixed income and $131.4 million in cash equivalents.

The profit-sharing fund, P&G's main retirement vehicle, is run internally. The equity portion of the profit-sharing fund is all in P&G stock. The above asset mix reflects the allocation of the profit-sharing fund.

The managers listed below run the defined benefit assets of the company's Norwich and Richardson-Vicks units.

**Equity managers:** Ariel Capital; Atlanta Capital; Babson; IDS Advisory; Northern Trust.

**Fixed-income managers:** Atlanta Capital; Northern Trust; Wells Fargo.

The Norwich fund's master trustee is Northern Trust; the Richardson-Vicks fund's master trustee is Bank of New York. P&G's profit-sharing fund is trusteed internally. The investment consultant is SEI.

Key personnel overseeing the investment management of the fund are Edwin H. Eaton, vice president and treasurer, and J.R. Smith, manager-pension plan coordination.

## Prudential Insurance Company of America

| | ($ millions) |
|---|---|
| Total assets | 4,294 |
| Defined benefit | 4,294 |
| Thrift or savings/401(k) | na |
| Employer contributions | 32 |
| Benefit payments | 136 |
| Passive investments: | |
| Indexed stocks | 524 |
| Indexed bonds | 111 |
| Alternative investments: | |
| International equities | 664 |
| International bonds | 137 |
| Venture capital | 9 |
| Real estate equity | 510 |
| Asset mix: | |
| Stocks | 62% |
| Fixed income | 22% |
| Cash equivalents | 4% |
| Real estate equity | 12% |

NEWARK, N.J. — The market value of Prudential Insurance Co. of America' defined benefit assets increased 18.8% to $4.294 billion as of Sept. 30 from $3.614 billion a year earlier. The company did not provide data on its savings or 401(k) plans.

All retirement plan funds are managed by Prudential.

A committee of three senior officers of the insurance company oversee the pension fund.

# R

## Raytheon Co.

| | ($ millions) |
|---|---|
| Total assets | 2,455 |
| Defined benefit | 1,984 |
| Defined contribution | 30 |
| 401(k) | 441 |
| Employer contributions | 130 |
| Benefit payments | 50 |
| Passive investments: | |
| Indexed stocks | 536 |
| Dedicated/immunized | 288 |
| Alternative investments: | |
| Real estate equity | 30 |
| Asset mix: | |
| Stocks | 72% |
| Bonds | 18% |
| Cash equivalents | 8% |
| Real estate equity | 2% |

LEXINGTON, Mass. — Raytheon's total employee benefit plan assets increased 33.4% to $2.455 billion from $1.84 billion for the year ended Sept. 30. By Oct. 31, total assets were down 14.5% to $2.1 billion.

The asset mix after the crash changed to 66% stocks from 72% before the crash, and toward bonds.

**Equity managers:** Bankers Trust; Batterymarch; Boston Co.; Brignoli, Curtis & Roberts; Dewey Square; Fidelity; Loomis Sayles; Matrix; Paribas; Rosenberg; State Street Research; and Sun Bank.

**Fixed-income managers:** Richmond Capital Management and Loomis Sayles.

The master trustee is Boston Safe Deposit & Trust.

Key personnel overseeing the investment management of the fund are Herbert Deitcher, vice president and treasurer; W. Bruce Livingston, manager-employee benefits financing; and Steven S. DeMeo, investment analyst.

## Employee Retirement System of Rhode Island

| | ($ millions) |
|---|---|
| Total assets | 1,809 |
| Defined benefit | 1,809 |
| Employer contributions | 105 |
| Benefit payments | 100 |
| In-house assets: | |
| Equities | 824 |
| Fixed income | 611 |
| Short term | 374 |
| Hedging devices: | |
| Stock options | Y |
| Asset mix: | |
| Stocks | 45.6% |
| Bonds | 33.7% |
| Cash equivalents | 20.7% |

PROVIDENCE, R.I. — The state of Rhode Island's pension fund increased 22% to $1.809 billion from $1.483 billion for the year ended Sept. 30.

After the stock market plunge of Oct. 19, the market value of the plan's assets dropped by 8.3% Oct. 22 figures compared with the asset value at the end of September. The Oct. 22 asset allocation was 40.4% stocks, 38.2% bonds and 21.4% cash.

The custodian is the Rhode Island Hospital Trust Bank.

Jerome Williams, deputy general treasurer, is the fund's chief executive.

## RJR Nabisco Inc.

| | ($ millions) |
|---|---|
| Total assets | 3,540 |
| Defined benefit | 2,600 |
| Thrift or savings/401(k) | 940 |
| Employer contributions | 83 |
| Benefit payments | 120 |
| In-house assets: | |
| Equities | 187 |
| Fixed income | 477 |
| Passive investments: | |
| Dedicated/immunized | 477 |
| Alternative investments: | |
| International equities | 30 |
| Venture capital | 24 |
| Real estate equity | 110 |
| Asset mix: | |
| Stocks | 58% |
| Bonds | 21% |
| Cash equivalents | 15% |
| Real estate equity | 4% |
| International | 1% |
| Venture capital | 1% |

ATLANTA, Ga. — RJR Nabisco's employee benefit assets grew 11.9% to $3.54 billion from $3.164 billion during the year ended Sept. 30.

**Equity managers:** (Domestic) Batterymarch; Campbell Advisors; Capital Guardian; Cooke-Bieler; Delaware Investment; C.J. Lawrence; Lieber; Reich & Tang; Schafer Capital; Warburg Pincus. (International) Globe Finlay.

**Fixed-income managers:** PIMCO, Scudder, Stevens.

**401 (k)/thrift:** Spears-Benzac; Vanguard; Wilkens & Nanovic.

**Real estate managers:** Copley, Mellon Capital; First Wachovia.

The master trustee is First Wachovia; the investment consultants are Frank Russell and Hamilton, Johnston.

Key person overseeing the investment management of the fund is R.E. Schultz, vice president-pension asset management.

## Rockwell International

| | ($ millions) |
|---|---|
| Total assets* | 9,200 |
| Defined benefit | 7,400 |
| Thrift or savings | 1,800 |
| Employer contributions | na |
| Benefit payments | na |

*P&I Age estimate

PITTSBURGH — Employee benefit assets at Rockwell International increased 13.3% to $9.2 billion as of Sept. 30 from $8.122 billion a year earlier, *Pensions & investment Age* estimates. Defined benefit assets increased an estimated 23.6% during the same period, to $7.4 billion from $5.936 billion.

According to the Money Market Directory, Rockwell's money managers are as follows:

**Managers:** Beutel, Goodman; Boston Co. Real Estate; Capital Guardian; Cashman, Farrell; Chase Investors; CIGNA; First Interstate; First Pacific; First RepublicBank; Hotchkis and Wiley; Manufacturers Bank; Metropolitan Life; J.P. Morgan; Morgan Stanley Asset; National Bank/Detroit; PRIMECAP; Provident Investment Counsel; Fayez Sarofim; Scudder, Stevens & Clark; Seafirst Bank; Security Pacific Investment; Security Pacific National; Siphron & Meyers; Stralem; Tower Capital; Transamerica; Vanguard; Waite & Correnti and Western Asset.

The master trustees are Mellon Bank and National Bank of Detroit.

Key personnel overseeing the investment management of the fund are E. William Altstaetter, vice president-pensions, insurance & risk management; Lee H. Cramer, treasurer; and Susan Leathers, director-pension assets management.

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Defined contribution plans will be highlighted July 11.

# S

## City & County of San Francisco Employees Retirement System

| | ($ millions) |
|---|---|
| Total assets | 3,189 |
| Defined benefit | 3,189 |
| Employer contributions | 250 |
| Benefit payments | 168 |
| In-house assets: | |
| Equities | 104 |
| Fixed income | 1,075 |
| Passive investments: | |
| Indexed stocks | 217 |
| Alternative investments: | |
| International equities | 241 |
| International bonds | 235 |
| Real estate equity | 113 |
| Mortgages | 9 |
| Mortgage-backed securities | 293 |
| Asset mix: | |
| Stocks | 38.2% |
| Bonds | 43% |
| Cash equivalents | 5.8% |
| Real estate equity | 3.5% |
| Mortgages | 0.3% |
| Mortgage-backed securities | 9.2% |

SAN FRANCISCO — The City & County of San Francisco Employees Retirement System had $3.189 billion in total employee benefit assets as of Sept. 30, an increase of 17.1% from $2.723 billion the previous year.

However, between Sept. 30 and Nov. 1, the assets for the plan declined 6.8% to $2.972 billion as a result of the turmoil in the stock market during October. The asset mix Nov. 1 was 31.6% stocks, 49.7% bonds, 4% cash equivalents, 3.8% real estate equity, 0.3% mortgages and 10.6% mortgage-backed securities.

**Equity managers:** (Domestic) Fred Alger; Axe Core; Furman Selz; Hahn Holland & Grossman; Hanson Investment; Loomis, Sayles; McCullough, Andrews & Cappiello; Nicholas-Applegate; and George B. Springman. (International) Capital Guardian; Morgan Grenfell; and Oechsle.

**Fixed-income managers:** (Domestic) Bankers Trust; Lehman; MacKay-Shields; and Scudder, Stevens & Clark. (International) First Chicago and Warburg.

**Real estate manager:** Coldwell Banker.

The master custodian is Bankers Trust; the investment consultants are Callan Associates and Pension Realty Advisors.

Key personnel overseeing the investment management of the fund are DeWitt Bowman, chief investment officer, and Carolyn Hamilton, assistant chief of investments.

## Sears, Roebuck & Co.

| | ($ millions) |
|---|---|
| Total assets | 8,225 |
| Defined benefit | 2,958 |
| Profit-sharing/401(k) | 5,267 |
| Employer contributions | na |
| Benefit payments | na |
| In-house assets: | |
| Equities | 1,649 |
| Fixed income | 766 |
| Short term | 176 |
| Other | 71 |
| Passive investments: | |
| Indexed stocks | 923 |
| Alternative investments: | |
| International equities | 248 |
| Venture capital | 75 |
| Real estate equity | 12 |
| Mortgages | 36 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 58% |
| Bonds | 26% |
| Cash equivalents | 6% |
| Mortgages | 2% |
| International | 8% |

CHICAGO — Employee benefit assets of Sears, Roebuck & Co. increased 21.2% to $8.225 billion as of Sept. 30 from $6.784 billion in December 1986. Defined benefit assets alone increased 18.7% during the 12 months, to $2.958 billion from $2.492 billion.

**Equity managers** (Domestic): Sears Investment Management.

(International): Capital Guardian and Fidelity International.

**Fixed-income manager:** Sears In-

vestment Management.

**Real estate manager:** Aldrich, Eastman & Waltch.

The master trustee is Continental Illinois.

The key person overseeing investment management of the fund is David V. Dootson, president of Sears Investment Management.

### Shell Oil Co.

| | ($ millions) |
|---|---|
| Total assets | 6,918 |
| Defined benefit | 3,307 |
| Defined contribution | 3,380 |
| 401(k) | 231 |
| Employer contributions | 160 |
| Benefit payments | 266 |
| Portfolio insurance | 100 |
| In-house assets: | |
| Equities | 276 |
| Fixed income | 876 |
| Short term | 179 |
| Passive investments: | |
| Indexed stocks | 790 |
| Indexed bonds | 20 |
| GICs | 70 |
| Alternative investments: | |
| Real estate equity | 300 |
| Mortgage-backed securities | 189 |
| Hedging devices: | |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 60.7% |
| Bonds | 18.5% |
| Cash equivalents | 2.5% |
| Real estate equity | 10.6% |
| Mortgage-backed securities | 5.6% |
| GICs | 2.1% |

HOUSTON — Total employee benefit assets at Shell increased by 19% to $6.918 billion as of Sept. 30 from $5.811 billion in 1986.

**Equity managers:** Criterion; Dodge & Cox; Equitable; Kemper; Fayez Sarofim; and Wells Fargo.

**Real estate managers:** Aetna; Equitable; First National Bank of Chicago; John Hancock; Heitman; and Prudential.

The master custodian is Bankers Trust; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are L.S. Chaikind, administrator; J.B. Kloehr, deputy administrator; R.J. Stapleton, manager-fixed income; K.T. Ng, manager-equities.

### South Carolina Retirement System

| | ($ millions) |
|---|---|
| Total assets | 5,171 |
| Defined benefit | 5,171 |
| Employer contributions* | 234 |
| Benefit payments | 216 |
| *as of June 30, 1987 | |
| In-house assets: | |
| Fixed income | 4,639 |
| Short term | 532 |
| Alternative investments: | |
| Mortgage-backed securities | 993 |
| Asset mix: | |
| Bonds | 70.5% |
| Cash equivalents | 10.3% |
| Mortgage-backed securities | 19.2% |

COLUMBIA, S.C. — Total benefit assets at the South Carolina Retirement System increased 3.5% to $5.171 billion from $4.996 billion for the 18 months ended Sept. 30. All assets are managed in-house.

The investment consultant is Jamison, Eaton & Wood.

Key personnel overseeing the investment management of the fund are Grady L. Patterson Jr., state treasurer; Michael Windham, senior assistant state treasurer-investments; and Shakun Tahiliani, coordinator of technical services.

### Annuity Board of the Southern Baptist Convention

| | ($ millions) |
|---|---|
| Total assets | 2,061 |
| Defined benefit | 752 |
| Defined contribution | 1,309 |
| Employer contributions | na |
| Benefit payments | 56 |
| Passive investments: | |
| GICs | 661 |
| Alternative investments: | |
| International equities | 32 |
| Real estate equity | 29 |
| Mortgages | 28 |
| Mortgage-backed securities | 79 |
| Hedging devices: | |
| Stock options | Y |
| Asset mix: | |
| Stocks | 29% |
| Bonds | 23% |
| Cash equivalents | 9% |
| Real estate equity | 1.5% |
| Mortgages | 1.5% |
| Mortgage-backed securities | 4% |
| GICs | 32% |

DALLAS — Total benefit assets at the Southern Baptist Convention increased by 16.6% to $2.061 billion as of Sept. 30 from $1.767 billion in 1986. The fund has $762 million in internally managed defined benefit and defined contribution assets; fund officials declined to break out the defined benefit assets.

**Equity managers:** Alliance; Capital Guardian; Lazard Freres; Loomis, Sayles; Provident; Scudder, Stevens; Seligman; and Thorndike, Doran.

**Fixed-income managers:** Sanford C. Bernstein; MacKay-Shields; J.P. Morgan; Morgan Stanley; Standish, Ayer; STW; and Western Asset.

The master trustee is First Republic-Bank Dallas; the investment consultant is SEI.

Key personnel overseeing the investment management of the fund are Harold D. Richardson, senior vice president; Dave L. Borders, vice president.

### Southern California Edison

| | ($ millions) |
|---|---|
| Total assets | 2,060 |
| Defined benefit | 1,299 |
| 401(k) | 538 |
| ESOP | 223 |
| Employer contributions | 61 |
| Benefit payments | 52 |
| Passive investments: | |
| GICs | 100 |
| Alternative investments: | |
| International equities | 77 |
| Venture capital | 19 |
| Real estate equity | 19 |
| Hedging devices: | |
| Stock options | Y |
| Bond options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 55% |
| Bonds | 25% |
| Cash equivalents | 10% |
| Real estate equity | 1% |
| GICs | 8% |
| Other | 1% |

ROSEMEAD, Calif. — As of Sept. 30, Southern California Edison Co.'s total employee benefit assets increased 17.3% to $2.06 billion from $1.756 billion a year earlier. Defined benefit assets increased 26.5% during the same period, to $1.299 billion from $1.027 billion. Because of market volatility, defined benefit assets totaled $1.163 billion as Oct. 31, a drop of 10.5%. Total assets as of that date were not available.

**Equity managers:** Batterymarch; Mellon Fund; PFR; PIMCO; Rosenberg; and Wentworth.

**Fixed-income managers:** PIMCO and Rosenberg.

**Real estate manager:** Pacific Mutual Realty.

**GIC managers:** Connecticut Mutual; John Hancock; Massachusetts Mutual; Morley Capital; and Washington Square.


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**Venture capital managers:** Euclid Partners II; Institutional Venture Partners; TCW I and II; and Venturtech.

**Cash managers:** Payden & Rygel and Bankers Trust.

The master trustee is Security Pacific National Bank; the investment consultants are DeMarche Associates and Frank Russell.

Key personnel overseeing the investment management of the fund are Michael L. Noel, vice president and treasurer; Lois G. Ingham, manager-pension investments; and Rick A. Yamamoto, supervisor-pension investments.

## Southern California UFCW Unions and Food Employers

| | ($ millions) |
|---|---|
| Total assets | 1,463 |
| Defined benefit | 1,463 |
| Employer contributions | 96 |
| Benefit payments | 65 |
| In-house assets: | |
| Short term | 145 |
| Passive investments: | |
| Indexed stocks | 72 |
| Alternative investments: | |
| Real estate equity | 30 |
| Mortgage-backed securities | 13 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 50.1% |
| Bonds | 24.1% |
| Cash equivalents | 24.1% |
| Real estate equity | 1.7% |

CYPRESS, Calif. — Assets of the Southern California United Food & Commercial Workers & Food Employers Joint Pension Trust Fund increased 23.9% to $1.463 billion as of Sept. 30, from $1.181 billion a year earlier.

The fund declined 8.4% because of October's market turmoil, to roughly $1.34 billion as of Oct. 31. On Oct. 31, the asset mix was 43.2% equities, 32.6% bonds, 22.2% cash and 2% real estate equity.

**Equity managers:** Batterymarch; Cramblit & Carney; Lazard; Oppenheimer Capital; Siebel; and Wells Fargo.

**Fixed-income managers:** Robert C. Brown and PIMCO.

**Real estate manager:** McMorgan.

The master trustee is Bank of America.

The key person overseeing the investment management of the fund is P. Colleen Thompson, administrator.

## The Southern Co.

| | ($ millions) |
|---|---|
| Total assets | 2,550 |
| Defined benefit | 2,000 |
| 401(k) | 550 |
| Employer contributions | 100 |
| Benefit payments | 44 |
| Passive investments: | |
| GICs | 30 |
| Alternative investments: | |
| Real estate equity | 10 |
| Hedging devices: | |
| Stock options | Y |
| Bond options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 67% |
| Bonds | 15% |
| Cash equivalents | 15% |
| Real estate equity | 1% |
| GICs | 2% |

ATLANTA — Total plan assets increased 23.8% to $2.55 billion from $2.06 billion during the year ended Sept. 30. During October, an estimated 15% of those gains were wiped out in the stock market crash. The effect of the crash on portfolio mix mirrored the effect on other plans: the stock portion decreased to 62%, bonds increased to 18%, and cash increased to 17%.

**Equity managers:** AmSouth Bank; INVESCO; Jundt/Capen; Lieber; Miller, Anderson & Sherrerd; Northern Capital; Spears, Benzak, Salomon & Farrell; and Strong/Corneliuson.

**Fixed-income managers:** Discount; FNB Atlanta; and Trusco.

The master trustee is Bankers Trust Co.

David Prince, assistant treasurer, oversees pension investments.

## Southern New England Telephone Co.

| | ($ millions) |
|---|---|
| Total assets | 1,700 |
| Defined benefit | 1,500 |
| Defined contribution | 200 |
| Employer contributions | 18 |
| Benefit payments | 48 |
| Passive investments: | |
| Indexed stocks | 665 |
| Alternative investments: | |
| International equities | 181 |
| Private placements | 28 |
| Real estate equity | 54 |
| Mortgage-backed securities | 8 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 75% |
| Bonds | 19% |
| Cash equivalents | 2% |
| Real estate equity | 3% |
| Mortgage-backed securities | 1% |

NEW HAVEN, Conn. — The Southern New England Telephone Co. reported total assets of $1.7 billion as of Sept. 30, a 23.6% increase from the $1.375 billion reported a year earlier. Defined benefit assets alone rose 22.5% during the same period, to $1.5 billion fom $1.225 billion.

October market volatility caused total assets to drop 17.6% to to $1.45 billion. Asset allocation changes resulting from the volatility were: bonds to 25% from 19%; real estate to 4% from 3%, and stocks to 68% from 75%.

**Equity managers:** American Express Asset; Analytic Investment; Atalanta/Sosnoff; Barrow, Hanley, McWhinney & Strauss; American National Bank, Chicago; Connecticut National Bank; Mercator; Moran; State Street Bank; Wellington/TDP&L; and Wells Fargo Investment.

**Fixed-income managers:** Connecticut National Bank; Dreyfus; Equitable; Putnam; and STW.

**Real estate managers:** CIGNA; JMB; LaSalle; and Security Capital.

The master trustee is Boston Safe Deposit.

Key personnel overseeing the investment management of the fund is John J. Miller, assistant secretary and assistant treasurer.

## Southwestern Bell Corp.

| | ($ millions) |
|---|---|
| Total assets | 7,231 |
| Defined benefit | 6,461 |
| Defined contribution | 770 |
| Employer contributions | na |
| Benefit payments | 240 |
| Passive investments: | |
| Indexed stocks | 2,227 |
| Dedicated/immunized | 1,762 |
| Alternative investments: | |
| International equities | 279 |
| Venture capital | 19 |
| Oil and gas | 40 |
| Real estate equity | 508 |
| Asset mix: | |
| Stocks | 62% |
| Bonds | 27% |
| Real estate equity | 6% |
| Oil and gas/venture capital | 3% |

ST. LOUIS — Southwestern Bell Corp.'s employee benefit assets rose 16.4% to $7.231 billion on Sept. 30, from $6.21 billion June 30, 1986.

**Equity managers:** (Domestic) First Republic; Franklin; Geo Capital; Jennison; Nicholas-Applegate; Pilgrim Baxter; Texas Commerce; Wells Fargo. (International) Fidelity; IDS, Nomura.

**Fixed-income managers:** Jennison; Mississippi Valley.

**Real estate managers:** Boston Co.; Heitman; JMB; McMahan; PSI; RREEF.

**Venture capital managers:** First Chicago; Crossroads.

**Oil and gas manager:** First Republic.

The master trustee is First Republic-Bank; the investment consultant is Buck Pension Fund Services.

Key personnel overseeing the investment management of the fund are Mary Ann Devine, district manager-pension investment and administration, and Charley Weaver, district manager-pension funds.

## The Standard Oil Co.

| | ($ millions) |
|---|---|
| Total assets | 1,946 |
| Defined benefit | 1,286 |
| 401(k) | 660 |
| Employer contributions | 120 |
| Benefit payments | 100 |
| In-house assets: | |
| Equities | 200 |
| Passive investments: | |
| Indexed stocks | 378 |
| Alternative investments: | |
| International equities | 131 |
| Venture capital | 19 |
| Real estate equity | 73 |
| Hedging devices: | |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 65% |
| Bonds | 20% |
| Cash equivalents | 7% |
| Real estate equity | 6% |
| Venture capital | 2% |

CLEVELAND — The Standard Oil Co.'s employee benefit assets rose 26.8% to $1.946 billion as of Sept. 30, 1986, from $1.535 billion on the same date a year earlier. Defined benefit assets alone grew 25.8% during the period, to $1.286 billion from $1.022 billion.

**Equity managers:** Jennison; MacKay-Shields; Manufacturers Hanover; Mellon Capital; National City Bank; Templeton; United Capital; and Value Line.

**Fixed-income manager:** Mellon Capital.

**Real estate managers:** First Chicago; John Hancock; Security Capital; and TCW.

The master trustee is Bankers Trust; the investment consultant is Frank Russell.

Key personnel overseeing investment management of the fund are E.J.P. Browne, executive vice president and chief financial officer; E.P. Campbell, vice president-finance; and D.J. Hamilton, director-pension investments.

## Sun Co. Inc.

| | ($ millions) |
|---|---|
| Total assets | 2,010 |
| Defined benefit assets | 1,600 |
| Defined contribution | 10 |
| 401(k) | 400 |
| Employer contributions | 43 |
| Benefit payments | 163 |
| Passive investments: | |
| Indexed stocks | 54 |
| Indexed bonds | 214 |
| GICs | 51 |
| Alternative investments: | |
| International equities | 242 |
| Real estate equity | 178 |
| Hedging devices: | |
| Stock options | Y |
| Bond options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 49% |
| Bonds | 29% |
| Cash equivalents | 8% |
| Real estate equity | 11% |
| GICs | 3% |

RADNOR, Pa. — Total benefit assets and pension assets increased 8.3% as of Sept. 30, to $2.01 billion from $1.856 billion a year earlier. Defined benefit assets alone increased 6.7% to $1.6 billion from $1.499 billion. After October's market turmoil, assets totaled $1.51 billion, a drop of 24.9%. The post-Oct. 19 asset mix was 44% equities; 30% bonds; 11% cash; 12% real estate; and 3% GICs.

**Equity managers:** (Domestic) Analytic Investment; Sanford Bernstein; Hellman, Jordan; Jennison; and Miller, Anderson & Sherrerd.

(International): Capital Guardian; Fidelity International; J.P. Morgan; Warburg; and Wells Fargo.

**Fixed-income managers:** Sanford C. Bernstein; Miller, Anderson & Sherrerd; and J.P. Morgan.

**Real estate managers:** Equitable and Prudential.

**GIC manager:** Aetna.

**Short-term managers:** Fischer, Francis, Trees & Watts and Bankers Trust.

The master trustee is Bankers Trust; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are R.L. Veith, manager-benefit plans investments, and Susan S.F. Graef, portfolio specialist.

## Teachers Insurance and Annuity Association — College Retirement Equities Fund

| | ($ millions) |
|---|---|
| Total assets | 66,171 |
| Defined contribution | 66,171 |
| Employer contributions | 2,800 |
| Benefit payments | 1,100 |
| In-house assets: | |
| Equities | 32,921 |
| Fixed income | 28,742 |
| Short term | 2,065 |
| Other | 2,443 |
| Passive investments: | |
| Indexed stocks | 20,771 |
| Alternative investments: | |
| International equities | 3,131 |
| International bonds | 100 |
| Oil and gas | 600 |
| LBOs | 600 |
| Private placements | 7,500 |
| Real estate equity | 1,628 |
| Mortgages | 13,486 |
| Mortgage-backed securities | 1,000 |
| Asset mix: | |
| Stocks | 49.7% |
| Bonds | 21.3% |
| Cash equivalents | 3.1% |
| Real estate equity | 2.4% |
| Mortgages | 20.4% |
| Mortgage-backed securities | 1.5% |
| Other | 1.6% |

NEW YORK — TIAA-CREF's pension assets increased 26.5% to $66.171 billion from $52.3 billion during the 12-month period ended Sept. 30, 1987.

Assets declined 9.3% to $60 billion during the month of October.

The custodians for TIAA are Morgan Guaranty and Citibank; and for CREF, Bankers Trust and Chase Manhattan.

Key personnel overseeing the investment management of TIAA are J Daniel Lee Jr., executive vice president, TIAA Investments; David B. Bullett, senior vice president, TIAA Securities; and John A. Somers, senior vice president, TIAA Mortgages & Real Estate.

Overseeing CREF investments are James S. Martin, executive vice president, CREF Investments; C. Oscar Morong, senior vice president, CREF Security Research; and Virgil H. Cumming, vice president, international investments.

## Teamsters, Central States, Southeast & Southwest Areas Pension Fund

| | ($ millions) |
|---|---|
| Total assets | 8,482 |
| Defined benefit | 8,482 |
| Employer contributions | 700 |
| Benefit payments | 834 |
| In-house assets: | |

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| | |
|---|---|
| Short term | 75 |
| Passive investments: | |
| Indexed stocks | 2,700 |
| Indexed bonds | 2,489 |
| Alternative investments: | |
| Private placements | 349 |
| Real estate equity | 21 |
| Mortgages | 31 |
| Mortgage-backed securities | 1,306 |
| Asset mix: | |
| Stocks | 43.5% |
| Bonds | 37% |
| Cash equivalents | 3.5% |
| Real estate equity | 0.2% |
| Mortgages | 0.3% |
| Mortgage-backed securities | 15.4% |
| Other | 0.1% |

CHICAGO -- The Teamsters, Central States, Southeast & Southwest Areas Pension Fund recorded a 20% growth in its employee benefit assets in the year ended Sept. 30, to $8.482 billion from $7.07 billion.

During Black October, the fund's assets dropped 8.7% to $7.74 billion as of Oct. 31. In that month, the fund's equities fell 19% to $2.98 billion from $3.68 billion, while its fixed income (including mortgage-backed securities but excluding cash equivalents) rose 2.5% to $4.56 billion from $4.45 billion. As of the end of October, the fund's equity allocation was down to 38.4% and its fixed-income allocation was 59%.

The fund is run externally by managers selected by its named fiduciary, Morgan Stanley, except for $75.1 million the Teamsters, Central States staff runs in cash equivalents.

**Equity managers:** BEA; Equitable; INVESCO; Mellon Capital; and Wells Fargo Bank.

**Fixed-income managers:** Bankers Trust; Fiduciary Trust; Lincoln Capital; MacKay-Shields; Mellon Bank; Miller Anderson & Sherrerd; T. Rowe Price; and Putnam Advisory.

**Real estate managers:** Eastdil and Karsten.

The master custodian is Mellon.

Morgan Stanley as named fiduciary is responsible for investment policy. The key person at Central States overseeing the fund is George Lehr, its executive director.

## Teamsters, New England Trucking Locals

| | ($ millions) |
|---|---|
| Total assets* | 1,392 |
| Defined benefit | 1,392 |
| Employer contributions | na |
| Benefit payments | na |

*P&I Age estimate

BOSTON — Employee benefit assets of the Teamsters, New England Trucking Locals increased 10% to $1.392 billion as of Sept. 30 from $1.265 billion a year earlier, according to a *Pensions & Investment Age* estimate.

**Investment manager:** Laidlaw Capital.

Key personnel overseeing the investment management of the fund are Helen Debreceni, pension fund manager, and Charles Langone, assistant fund manager.

## Western Conference of Teamsters Pension Trust

| | ($ millions) |
|---|---|
| Total assets* | 7,524 |
| Defined benefit | 7,524 |
| Employer contributions | 480 |
| Benefit payments | 540 |

*as of Aug. 31, 1987

| | |
|---|---|
| Passive investments: | |
| Indexed stocks | 780 |
| Indexed bonds | 376 |
| Dedicated/immunized | 5,530 |
| Alternative investments: | |
| Real estate equity | 640 |
| Mortgages | 151 |
| Asset mix: | |
| Stocks | 21.4% |
| Bonds | 55.9% |
| Cash equivalents | 0.2% |
| Real estate equity | 8.5% |
| Mortgages | 2% |
| Annuities | 22% |

SEATTLE — The Western Conference of Teamsters Pension Trust's employee benefit assets declined 0.6% to $7.524 billion as of Aug. 31, 1987, from $7.571 billion a year earlier. Because of the market turmoil during October, the asset value as of Oct. 31, was $7.424 billion, a decline of 1.3%.

**Equity managers:** Fidelity; Prudential; and Wells Fargo.

**Fixed-income manager:** Prudential.

**Real estate manager:** Prudential.

The master custodian is Boston Safe; the investment consultant is Alan D. Biller & Associates.

Key personnel overseeing the investment management of the fund are John Bacon, chairman of the investment committee; and Joseph Ballew and Owen Bennett, co-chairmen of the trust.

## Teledyne Inc.

| | ($ millions) |
|---|---|
| Total assets* | 1,267 |
| Defined benefit assets | 1,267 |
| Employer contributions | na |
| Benefit payments | na |

*P&I Age estimate

| | |
|---|---|
| In-house assets: | |
| Fixed income | 1,253 |
| Short term | 14 |
| Asset mix: | |
| Bonds | 99% |
| Cash | 1% |

LOS ANGELES — Teledyne Inc. had $1.267 billion in total employee benefit assets as of Sept. 30, according to a *Pensions & Investment Age* estimate.

All assets are managed in-house.

The master custodian is First RepublicBank.

Key personnel overseeing the investment management of the fund are H.E. Singleton, chairman of the board; C.E. Rinseh, vice president, secretary and treasurer; and B.J. Baker, assistant to the president.

## Tenneco Inc.

| | ($ millions) |
|---|---|
| Total assets | 2,635 |
| Defined benefit | 1,810 |
| 401(k) | 750 |
| ESOP | 75 |
| Employer contributions | 80 |
| Benefit payments | 50 |

| | |
|---|---|
| Passive investments: | |
| Indexed stocks | 450 |
| Indexed bonds | 380 |
| Hedging devices: | |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 60% |
| Bonds | 30% |
| Cash equivalents | 10% |

HOUSTON — The total employee benefit assets at Tenneco increased 35.8% to $2.635 billion as of Sept. 30, from $1.94 billion a year earlier. Defined benefit assets in that period rose 44%, to $1.81 billion from $1.256 billion. Because of the market turmoil during October, however, the defined benefit assets totaled $1.57 billion Nov. 1, a drop of 15.3%.

**Equity managers:** Sanford Bernstein; Capstone Asset Management; Delaware; Dimensional Fund; IDS; Pilgrim Baxter; and Fayez Sarofim.

**Fixed-income managers:** Bridge Capital; Capstone; First RepublicBank Dallas; Fisher Francis Trees & Watts; State Street Research; and STW.

The master trustee is First RepublicBank Dallas; the investment consultant is Callan.

Key personnel overseeing the investment management of the fund are K.W. Reese, executive vice president, and A.M. Stewart, pension investment officer.

## Tennessee Consolidated Retirement System

| | ($ millions) |
|---|---|
| Total assets | 6,132 |
| Defined benefit assets | 6,132 |
| Employer contributions | 170 |
| Benefit payments | na |

| | |
|---|---|
| In-house assets: | |
| Equities | 2,131 |
| Fixed income | 2,627 |
| Short term | 729 |
| Other | 445 |
| Alternative investments: | |
| International equities | 283 |
| International bonds | 162 |
| Private placements | 7 |
| Mortgage-backed securities | 300 |
| Hedging devices: | |
| Stock options | Y |
| Asset mix: | |
| Stocks | 34% |
| Bonds | 42% |
| Cash equivalents | 12% |
| Mortgage-backed securities | 5% |
| International | 7% |


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NASHVILLE, Tenn. — Assets of the Tennessee Consolidated Retirement System increased 14.8% to $6.132 billion as of Sept. 30 from $5.34 billion the previous year. Because of the market turmoil in October, the fund dropped 5.7% to $5.782 billion.

The master custodian is Chase.

Key personnel overseeing the investment management of the fund are Charles A. Webb, chief investment officer, and Marshall Cox, fixed-income manager.

## Tennessee Valley Authority

| | ($ millions) |
|---|---|
| Total assets | 2,574 |
| Defined benefit | 2,461 |
| Thrift or savings | 113 |
| Employer contributions | 86 |
| Benefit payments | 64 |
| Passive investments: | |
| Indexed stocks | 403 |
| Indexed bonds | 70 |
| GICs | 83 |
| Alternative investments: | |
| international bonds | 51 |
| Real estate equity | 25 |
| Asset mix: | |
| Stocks | 41% |
| Bonds | 42.3% |
| Real estate equity | 1% |
| GICs | 3.4% |
| Other | 12.3% |

KNOXVILLE, Tenn. — The Tennessee Valley Authority's total employee benefit assets increased 26.9% as of Sept. 30, to $2.574 billion from $2.028 billion a year earlier. During the same period, defined benefit assets rose 155%, to $2.461 billion from $964 million.

Because of the market turmoil during October, defined benefit assets fell 11%, to $2.19 billion as of Oct. 31.

**Equity managers:** Aetna Capital; American National Bank/Chicago; Citibank; Lord, Abbett; and Paribas.

**Bond managers:** American National Bank & Trust; Bank of New York, Citibank; Commerce Union Bank/Nashville; DFG; First American Bank/Nashville; First American National/Knoxville; Third National Bank/Nashville; and U.S. Trust.

**Real estate manager:** Citibank.

The investment consultant is Wilshire.

Key personnel overseeing investment management of the fund are Dale H. Kangas, executive secretary, TVA Retirement System; L.H. Edwards, chairman-board of directors; and R.L. Yates, chairman-investment committee.

## Texaco Inc.

| | ($ millions) |
|---|---|
| Total assets | 2,400 |
| Defined benefit assets | 1,500 |
| Thrift or savings/401(k) | 900 |
| Employer contributions | na |
| Benefit payments | na |

WHITE PLAINS, N.Y. — Texaco's pension assets increased 8.2% to $2.4 billion Sept. 30, from $2.219 billion the year before. Defined benefit assets increased 17.7% during the same period, to $1.5 billion from $1.274 billion.

The company declined to disclose any further information.

The master trustee is Chase Manhattan Bank.

Michael V. Carlucci, assistant treasurer, oversees investment management of the funds.

## Texas County & District Retirement System

| | ($ millions) |
|---|---|
| Total assets | 1,500 |
| Defined contribution | 1,500 |
| Employer contributions | 60 |
| Benefit payments | 42 |
| In-house assets: | |
| Fixed income | 1,470 |
| Short term | 30 |
| Alternative investments: | |
| Mortgage-backed securities | 566 |
| Asset mix: | |
| Bonds | 63% |
| Mortgage-backed securities | 37% |

AUSTIN, Texas — As of Sept. 30, the Texas County & District Retirement System's benefit assets increased 18% to $1.5 billion from $1.271 billion a year earlier.

J. Robert Brown, executive director, oversees the investment management of the fund.

## Employees Retirement System of Texas

| | ($ millions) |
|---|---|
| Total assets* | 4,792 |
| Defined benefit | 4,792 |
| Employer contributions | 159 |
| Benefit payments | 154 |

*as of Aug. 31, 1987

| | |
|---|---|
| In-house assets: | |
| Equities | 1,166 |
| Fixed income | 3,461 |
| Other | 165 |
| Passive investments: | |
| Indexed stocks | 175 |
| Alternative investments: | |
| Mortgage-backed securities | 471 |
| Asset mix: | |
| Stocks | 24.3% |
| Bonds | 62.4% |
| Cash equivalents | 3.5% |
| Mortgage-backed securities | 9.8% |

AUSTIN, Texas — Total assets of the Employees Retirement System of Texas increased 11.2% for the 12 months ended Aug. 31, to $4.792 billion from $4.31 billion. Because of the market turmoil, total assets slipped 8% to $4.4 billion Nov. 1.

**Equity adviser:** INVESCO.

**Fixed-income adviser:** Duff & Phelps.

The master custodian is the state treasurer; the investment consultant is Wilshire.

Key personnel overseeing the investment management of the fund are Clayton T. Garrison, executive director; Nancy G. Goerdel, deputy director for investments; and Stephen Arnold, assistant investment officer.

## Texas Municipal Retirement System

| | ($ millions) |
|---|---|
| Total assets | 1,600 |
| Defined contribution | 1,600 |
| Employer contributions | na |
| Benefit payments | na |
| In-house assets: | |
| Fixed income | 1,600 |
| Asset mix: | |
| Bonds | 100% |

AUSTIN, Texas — The Texas Municipal Retirement System reported an 18.5% increase in total employee benefits as of Sept. 30, to $1.6 billion from $1.35 billion the previous year.

The master custodian is First City Bank of Austin; the investment consultant is Duff & Phelps.

Key personnel overseeing the investment management of the fund are Jimmie L. Mormon, director, and Preston G. Craig, investment officer.

Leasing: Oct. 3.

## Teacher Retirement System of Texas

| | ($ millions) |
|---|---|
| Total assets | 18,930 |
| Defined benefit | 18,930 |
| Employer contributions | 654 |
| Benefit payments | 841 |
| In-house assets: | |
| Equities | 7,970 |
| Fixed income | 8,802 |
| Short term | 738 |
| Other | 1,420 |
| Alternative investments: | |
| Private placements | 2,189 |
| Mortgages | 1,420 |
| Mortgage-backed securities | 1,393 |
| Asset mix: | |
| Stocks | 42.1% |
| Bonds | 39.2% |
| Cash equivalents | 3.9% |
| Mortgages | 7.5% |
| Mortgage-backed securities | 7.3% |

AUSTIN, Texas — Total assets of the Teacher Retirement System of Texas increased 43.4% to $18.93 billion as of Sept. 30, from $13.198 billion the previous year. The assets are managed internally, with Thorndike, Doran, Paine & Lewis serving as adviser.

The custodian is the state treasurer.

Key personnel overseeing the investment management of the fund are Bruce Hineman, executive director; Joe Perrone, chief investment officer; Jack Cooper, assistant investment officer-fixed income; George Reagan, assistant investment officer-equities; and John Brown, assistant investment officer-real estate.

## Textron Inc.

| | ($ millions) |
|---|---|
| Total assets | 2,881 |
| Defined benefit assets | 2,200 |
| Defined contribution | 536 |
| Profit-sharing | 145 |
| Employer contributions | na |
| Benefit payments | 247 |
| In-house assets: | |
| Equities | 484 |
| Fixed income | 528 |
| Short term | 420 |
| Other | 202 |
| Passive investments: | |
| GICs | 40 |
| Alternative investments: | |
| Oil and gas | 25 |
| LBOs | 50 |
| Private placements | 75 |
| Real estate equity | 151 |
| Asset mix: | |
| Stocks | 40.1% |
| Bonds | 26.2% |
| Cash equivalents | 19.9% |
| Real estate equity | 6.7% |
| GICs | 1.8% |
| Other | 5.3% |

PROVIDENCE, R.I. — Total employee benefit assets at Textron increased 15.1% to $2.881 billion as of Sept. 30 from $2.502 billion a year earlier. Defined benefit assets alone increased 14% during the 12 months, to $2.2 billion from $1.93 billion.

**Equity managers:** Sanford Bernstein; Continental Illinois; Delaware Advisors; Textron Investment Management; Thorndike, Doran, Paine & Lewis; and Trinity.

**Fixed-income managers:** Alliance; Continental Illinois; National Bank of Detroit; and Textron Investment Management.

**Real estate managers:** Prudential and Textron Investment Management.

**GIC manager:** Metropolitan Life.

The master trustees are Bankers Trust and National Bank of Detroit.

Overseeing the investment management of the fund is Richard Watson, Textron vice president and president of Textron Investment Management Co.

## Times Mirror Co.

| | ($ millions) |
|---|---|
| Total assets | 1,354 |
| Defined benefit assets | 933 |
| Profit-sharing | 21 |
| 401(k) | 150 |
| ESOP | 250 |
| Employer contributions | 31 |
| Benefit payments | 40 |
| In-house assets: | |
| Equities | 138 |
| Passive investments: | |
| Indexed stocks | 160 |
| GICs | 37 |
| Alternative investments: | |
| Venture capital | 3 |
| Real estate equity | 11 |
| Mortgage-backed securities | 50 |
| Hedging devices: | |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 60.9% |
| Bonds | 15.3% |
| Cash equivalents | 1.8% |
| Real estate equity | 1.2% |
| Mortgage-backed securities | 5.4% |
| GICs | 4% |
| Annuities | 11.4% |

LOS ANGELES — Total employee benefit assets at Times Mirror Co. increased 26.7% to $1.354 billion as of Sept. 30, from $1.069 billion the year before.

Because of the market turmoil during October, the fund had $1.16 billion in total assets Oct. 31, a drop of 14%. The asset mix as of Oct. 31 had shifted to 56% equities; 23% bonds (including mortgage-backed securities); 2% cash; 1% real estate equity; and 18% GICs and GACs.

**Equity managers:** Aetna; Bankers Trust; Sanford Bernstein; Cooke & Bieler; Denver Investment; First Pacific; First RepublicBank Dallas; and INVESCO.

**Fixed-income managers:** Bankers Trust; PIMCO; and Weiss, Peck & Greer.

**Real estate manager:** Aetna.

**GIC/GAC managers:** Aetna and Prudential.

**Venture capital managers:** Brentwood and Montgomery Securities.

The master trustee is Citibank.

Key personnel overseeing the investment management of the fund are R. David Kretschmer, manager-investment programs, and Joyce M. Fields, treasurer.

## Trans World Airlines Inc.

| | ($ millions) |
|---|---|
| Total assets | 2,571 |
| Defined benefit | 1,296 |
| Defined contribution | 1,195 |
| Thrift or savings/401(k) | 75 |
| 401(k) | 5 |
| Employer contributions | 58 |
| Benefit payments | 145 |
| In-house assets: | |
| Equities | 390 |
| Fixed income | 113 |
| Short term | 19 |
| Passive investments: | |
| GICs | 151 |
| Alternative investments: | |
| International bonds | 20 |
| Real estate equity | 17 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 35% |
| Bonds | 9% |
| Cash equivalents | 9% |
| Real estate equity | 1% |
| GICs | 13% |
| IPG contract | 33% |

KANSAS CITY, Mo. — Trans World Airlines Inc.'s employee benefit assets increased 13.5% in the 12 months ended Sept. 30, to $2.571 billion from $2.265 billion. Defined benefit assets alone increased 18.5%, to $1.296 billion as of Sept. 30 from $1.094 billion a year earlier.

**Equity managers:** Dreyfus; Estabrook; Fidelity; Fort Hill; GAMCO; McGlinn; Mellon; J.P. Morgan; Putnam; Scudder, Stevens & Clark; Shields Asset; and State Street Research.

**Fixed-income manager:** J.P. Morgan.

**Real estate managers:** Aetna; Citicorp; Coldwell Banker; J.P. Morgan; NCNB; State Street Bank; and TCW.

**GIC managers:** Aetna; Capital Holdings; LICOVA; New England Life; and PRIMCO.

The master trustees are Boston Safe, Meridian Trust, Morgan Guaranty and Shawmut Bank.

The key person overseeing the investment management of the fund is Gary Dilley, director-pension finance.

## Travelers Insurance Cos.

| | ($ millions) |
|---|---|
| Total assets | 1,823 |
| Defined benefit assets | 1,377 |
| Thrift or savings | 304 |
| 401(k) | 76 |
| TESOP/IRA | 66 |
| Employer contributions | 56 |
| Benefit payments | 55 |
| In-house assets: | |
| Equities | 495 |
| Fixed income | 172 |
| Short term | 78 |
| Other | 632 |
| Passive investments: | |
| Indexed stocks | 90 |
| Alternative investments: | |


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| | |
|---|---|
| International equities | 113 |
| Private placements | 35 |
| Real estate equity | 78 |
| Mortgages | 17 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 36% |
| Bonds | 12% |
| Cash equivalents | 6% |
| Real estate equity | 6% |
| Mortgages | 1% |
| Annuities | 31% |
| International equities | 8% |

HARTFORD, Conn. — Total assets of The Travelers Insurance Cos. employee benefit plans increased 17.4% in the 12 months ended Sept. 30, to $1.823 billion from $1.553 billion. Defined benefit assets alone increased 18.8% during the period, to $1.377 billion from $1.159 billion a year earlier.

**Equity managers:** Travelers Investment Management and Dillon Read.

**Fixed-income manager:** Travelers Keystone.

**Real estate manager:** Travelers Real Estate.

The master trustee is Connecticut National Bank; the investment consultant is Travelers Investment Management.

Key personnel overseeing the investment management of the fund are Richard J. Shima and Thomas O. Thorsen, executive vice presidents of Travelers; David M. Dunford, president of Travelers Investment Management; and Kent A. Kelley, executive vice president of Travelers Investment Management.

## TRW Inc.

| | ($ millions) |
|---|---|
| Total assets | 2,228 |
| Defined benefit | 2,041 |
| Defined contribution | 187 |
| Employer contributions | 18 |
| Benefit payments | 108 |
| In-house assets: | |
| Equities | 68 |
| Alternative investments: | |
| International equities | 206 |
| Venture capital | 28 |
| Hedging devices: | |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 60% |
| Bonds | 14.4% |
| Cash equivalents | 24.6% |
| Venture capital | 1% |

CHAGRIN FALLS, Ohio — Assets of the TRW Inc. fund rose 11% in the year ended Sept. 30, to $2.228 billion from $2.005 billion. Defined benefit assets during the same period rose 11.3%, to $2.041 billion as of Sept. 30 from $1.834 billion the previous year.

During the market turmoil in October, the fund lost about 14.6%, or $300 million, but fund officials did not change the asset mix.

**Equity managers** (Domestic): Fred Alger; Alliance; Baring America; Campbell Advisors; Investment Counselors of Maryland; and Westwood Capital.

(International): Baring International and Ivory & Sime.

**Fixed-income managers:** Hoisington Investment Management; MacKay-Shields; and PIMCO.

The master trustee is Boston Safe Deposit.

Key personnel overseeing the investment management of the fund are Ted Button, president of TRW Investment Management, and Bob Hamje, vice president, of TRW Investment.

U

## Union Carbide Corp.

| | ($ millions) |
|---|---|
| Total assets | 1,663 |
| Defined benefit | 1,663 |
| Employer contributions | 0 |
| Benefit payments | 70 |
| In-house assets: | |
| Equities | 397 |
| Fixed income | 854 |
| Short-term | 57 |
| Other | 121 |
| Passive investments: | |
| Indexed bonds | 300 |
| Alternative investments: | |
| Private placements | 10 |
| Real estate equity | 45 |
| Mortgages | 102 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 28% |
| Bonds | 58% |
| Cash equivalents | 4% |
| Real estate equity | 3% |
| Mortgages | 5% |
| Annuities | 2% |

DANBURY, Conn. — Union Carbide Corp.'s defined benefit assets declined 42.3% to $1.663 billion as of Sept. 30 from $2.88 billion the year before. Total asset figures were not available.

The drop was due largely to the purchase of $1.2 million in annuities under a non-participating contract with Prudential Asset Management Co., according to a fund spokesman. Those assets previously had been in a participating annuity contract with Prudential, under which Union Carbide officials maintained management of the assets and the benefit fund received any returns above those needed to cover the annuities.

The pension assets declined 1.9% during October to $1.631 billion as of Oct. 31 from $1.663 billion Sept. 30. The asset mix as of Oct. 31 was stocks 20%; bonds 54%; real estate equity and mortgages combined 10%; and cash 16%.

**Equity managers:** Benefit Capital Management; Boston Co.; and Capital Guardian.

**Fixed-income managers:** Benefit Capital; Boston Co.; and Scudder, Stevens & Clark.

**Real estate manager:** Benefit Capital.

The master trustee is Manufacturers Hanover.

Key personnel overseeing the investment management of the fund are Michael F. Hoben, president of Benefit Capital Management Co., the company's in-house management operation; and Lawrence R. Fuller and Robert Borstein, vice presidents of Benefit Capital.

## Unisys Corp.

| | ($ millions) |
|---|---|
| Total assets | 4,691 |
| Defined benefit | 3,037 |
| 401(k) | 1,654 |
| Employer contributions | 76 |
| Passive investments: | |
| Indexed stocks | 713 |
| Dedicated/immunized | 329 |
| GICs | 248 |
| Alternative investments: | |
| International equities | 173 |
| Venture capital | 33 |
| Real estate equity | 109 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 75% |
| Bonds | 11% |
| Cash equivalents | 1% |
| Real estate equity | 4% |
| GICs | 8% |
| Venture capital | 1% |

BLUE BELL, Pa. — Unisys Co.'s total benefit assets and pension assets grew 21% to $4.691 billion as of Sept. 30 from $3.88 billion in the previous year. Defined benefit assets alone grew 24.5%, to $3.037 billion from $2.44 billion the previous year.

Total assets after the market drop of October were $2.561 billion, a drop of 45.4%.

**Equity managers:** (Domestic) Fred Alger; Chase Investors; Concord Capital; Geewax Terker; Lazard Freres; Liberty Square; Mellon Capital; Nicholas-Applegate; NWQ Investment; Pacific Financial Research; PRIMECAP; Thomson, Horstmann & Bryant;


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and United Capital. (International) Mellon-Pictet; Mercator; Putnam; and Thorndike, Doran, Paine & Lewis.

**Fixed-income managers:** Harris Trust; M.D. Sass Investors; and Security Capital.

**Venture capital manager:** Abbott Capital.

**Real estate managers:** Chemical Bank; Coldwell Banker; JMB; LaSalle; National Bank of Detroit; and RCB.

The master trustee is Harris Trust; the investment consultant is Towers, Perrin, Forster & Crosby.

Key personnel overseeing the investment management of the fund are David A. White, corporate director; George F. Sprenkle, director-investment programs; and Charles A. Service, manager-investment programs.

## General Board of Pensions for the United Methodist Church

| | ($ millions) |
|---|---|
| Total assets | 2,957 |
| Defined benefit | 2,878 |
| Defined contribution | 79 |
| Employer contributions | 187 |
| Benefit payments | 117 |
| In-house assets: | |
| Fixed income | 285 |
| Short term | 111 |
| Other | 3 |
| Passive investments: | |
| Indexed stocks | 508 |
| Dedicated/immunized | 51 |
| GICs | 332 |
| Alternative investments: | |
| Real estate equity | 62 |
| Mortgages | 3 |
| Mortgage-backed securities | 64 |
| Hedging devices: | |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 60.7% |
| Bonds | 14.7% |
| Cash equivalents | 11.2% |
| Real estate equity | 2% |
| Mortgages | 0.2% |
| GICs | 11.2% |

EVANSTON, Ill. — The total benefit assets of the General Board of Pensions for the United Methodist Church increased 22.4% to $2.957 billion from $2.416 billion for the year ended Sept. 30. Assets fell 12% to $2.6 billion for the period Sept. 30 to Oct. 31. The asset mix Oct. 31 was 54.8% stocks, 17.9% bonds, 12.8% GICs, 12% cash equivalents, 2.3% real estate equity and 0.2% mortgages.

**Equity managers:** Alger; American National; Capital Guardian; Chase Investment; Delaware; Fidelity; INVESCO; McStay; Nicholas-Applegate; Olympic; Rosenberg; W.P. Stewart; Westwood; and Yeager, Wood & Marshall.

**Fixed-income managers:** American National; CIGNA; Criterion; Lincoln Capital; Stein Roe & Farnham; and STW.

**Real estate managers:** CIGNA and JMB.

The master custodian is Chase Manhattan; the investment consultant is Hotchkiss Associates.

Key personnel overseeing the investment management of the fund are James Parker, general secretary; F. Gale Witson-Schmidt, chief financial officer; and Diane Pinney, treasurer.

## United Mine Workers of America Health & Retirement Funds

| | ($ millions) |
|---|---|
| Total assets | 4,825 |
| Defined benefit | 4,825 |
| Employer contributions | na |
| Benefit payments | na |
| In-house assets: | |
| Fixed income | 418 |
| Short term | 36 |
| Passive investments: | |
| Indexed stocks | 455 |
| Indexed bonds | 418 |
| Dedicated/immunized | 1,636 |
| Alternative investments: | |
| Real estate equity | 168 |
| Hedging devices: | |
| Stock options | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 45% |
| Bonds | 50% |
| Cash equivalents | 1% |
| Real estate equity | 4% |

WASHINGTON — Total benefit assets of the UMWA Health & Retirement Funds as of Sept. 30 were up 14.3% to $4.825 billion from $4.223 billion a year earlier.

Because of market volatility during October, the assets totaled $4.474 billion Oct. 31, a drop of 7.3%. The asset allocation Oct. 31 was stocks, 40%; bonds, 51%; real estate equity, 4%; and cash equivalents, 5%.

**Equity managers:** Argus; Barrow, Hanley, Mewhinney & Strauss; Brignoli, Curley & Roberts; Concord; Denver; Dreman; Lazard Freres; Loomis Sayles; Wells Fargo; and Windsor Fund.

**Fixed-income managers:** Criterion; Loomis Sayles; J.P. Morgan; and STW.

**Real estate managers:** Goldman Sachs; Metropolitan Life; RREEF; State Street; and TCW.

The master custodian is Boston Safe.

Key personnel overseeing the investment management of the fund are Jerry N. Clark, executive director; Charles S. Stephens, director of investments and treasurer; and Terrence L. Bercini, assistant director of investments.

## United Nations Joint Staff Pension Fund

| | ($ millions) |
|---|---|
| Total assets | 7,428 |
| Defined benefit | 7,428 |
| Employer contributions | 320 |
| Benefit payments | 400 |
| In-house assets: | |
| Equities | 4,005 |
| Fixed income | 1,842 |
| Short term | 860 |
| Alternative investments: | |
| International equities | 2,070 |
| International bonds | 953 |
| Other international | 663 |
| Real estate equity | 721 |
| Asset mix: | |
| Stocks | 53.9% |
| Bonds | 24.8% |
| Cash equivalents | 11.6% |
| Real estate equity | 9.7% |

NEW YORK — Pension assets of the United Nations Staff Pension Fund rose 26.2% to $7.428 billion as of Sept. 30, from $5.884 billion a year earlier.

The market volatility, however, caused the fund to shrink 11.3% in the month of October, to $6.59 billion. As of Oct. 31, the asset mix had shifted to 46% stocks, 34% bonds, 9% cash and 11% real estate equity.

The fund participates in outside real estate vehicles, but declined to identify them.

The custodian is Fiduciary Trust Co. International, which also provides investment advice.

Key personnel overseeing the investment management of the fund are Pierre Henchoz, chief-investment management section; Henry Ouma, deputy chief; and Susan Farber, Mauricio Rezende, Dagmar Hesse-Kriendler and Fernando Torres-Torija, investment officers.

## United Technologies Corp.

| | ($ millions) |
|---|---|
| Total assets | 6,946 |
| Defined benefit | 5,495 |
| Thrift or savings | 1,451 |
| Employer contributions | 133 |
| Benefit payments | 256 |
| Passive investments: | |
| Indexed stocks | 376 |
| Dedicated/immunized | 60 |
| Alternative investments: | |
| International equities | 485 |
| International bonds | 284 |
| Venture capital | 54 |
| Oil and gas | 6 |
| LBOs | 79 |
| Real estate equity | 268 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 45% |
| Bonds | 18% |
| Cash equivalents | 7% |
| Real estate equity | 4% |
| Annuities | 24% |
| Other | 2% |

HARTFORD, Conn. — Total benefit assets at United Technologies Corp. increased 13.7% to $6.946 billion as of Sept. 30 from $6.108 billion a year earlier. Defined benefit plan assets rose 15.5% in the same period, to $5.495 billion from $4.758 billion.

**Equity managers** (Domestic): Ardsley Partners; Bankers Trust; Sanford Bernstein; Citibank; Fidelity Management Trust; Jennison; Lehman; Matrix Capital; Miller, Anderson & Sherrerd; Nicholas-Applegate; TCW; Trinity; Value Line; and Wright Investors.

(International): ABD International; Arnhold & S. Bleichroeder; Chase Investors; PCM International; Schroder; State Street; and Swiss Bank Corp.

**Fixed-income managers** (Domestic): CIGNA; Delaware; W.R. Huff; Jennison; Loomis Sayles; MacKay-Shields; and Neuberger & Berman.

(International): First Chicago and N.M. Rothschild.

**Real estate managers:** Aetna; Boston Co.; CIGNA; Lehndorff & Babson.

**Venture capital manager:** Manufacturer's Hanover; various partnerships.

The master trustee is Citibank; the investment consultant is Frank Russell.

The key person overseeing the investment management of the fund is Frances M. Crimbly, director-pension investments.

## Unocal Corp.

| | ($ millions) |
|---|---|
| Total assets | 1,405 |
| Defined benefit | 965 |
| Profit-sharing/401k | 440 |
| Employer contributions | 10 |
| Benefit payments | 60 |
| In-house assets: | |
| Short term | 100 |
| Alternative investments: | |
| International equity | 75 |
| Venture capital | 7 |
| Asset mix: | |
| Stocks | 53% |
| Bonds | 6% |
| Cash equivalents | 24% |
| Annuities | 17% |

LOS ANGELES — Unocal Corp. had $1.405 billion in total employee benefit assets as of Sept. 30, an increase of 16.4% from $1.207 billion the previous years. Defined benefit assets increased 13.1% in the same period, to $965 million from $853 million a year earlier.

**Equity managers:** Cooke & Bieler; Martin Currie; Delaware Investment; Hellman Jordan; IDS Advisory; Lincoln Capital; and Trinity.

**Fixed-income managers:** Criterion and Hoisington.

The master trustee is Northern Trust; the investment consultant is Frank Russell.

Gene Prochnow, manager-benefit plan investments, oversees investment management of the fund.

## U S WEST Inc.

| | ($ millions) |
|---|---|
| Total assets* | 8,046 |
| Defined benefit | 7,094 |
| Thrift or savings | 816 |
| ESOP | 136 |
| Employer contributions | 110 |
| *From Money Market Directory | |
| Passive investments: | |
| Indexed | 1,448 |
| Alternative investments: | |
| International equities | 885 |
| Venture capital | 161 |
| Real estate equity | 402 |
| Asset mix: | |
| Stocks | 44% |
| Bonds | 30% |
| Cash equivalents | 1% |
| Real estate equity | 5% |
| Venture capital | 2% |
| Indexed | 18% |

ENGLEWOOD, Colo. — U S WEST Inc.'s total employee benefit assets rose 9.5% to just more than $8 billion as of June 30 from almost $7.35 billion as of Sept. 30, 1986, according to the Money Market Directory, which supplied the most recent statistics and listing of managers. Defined benefit assets rose 11.7%, to $7.094 billion from $6.35 billion during the same period.

**Equity managers:** (Domestic) Brignoli, Curley & Roberts; Concord Capital; Denver Investment Advisors; First Chicago Investment; David J. Greene; Moran Asset; PRIMECAP; and Fayez Sarofim. (International): Morgan Stanley and National Investment Services of America.

**Fixed-income managers:** Jennison.

**Short-term manager:** Payden & Rygel.

**Real estate managers:** Copley; Jones Lang Wootton; LaSalle; Security Capital; and TCW.

**Venture capital manager:** Citicorp.

**Other managers:** Capital Guardian; First Manhattan; Mellon Capital; Trinity Investment; and Wells Fargo Investment.

The master trustee is Boston Safe Deposit.

Key personnel overseeing the investment management of the fund are James J. Biundo, trust investment management and assistant treasurer, and James R. Belquist, director-trust investment management.

## USX Corp.

| | ($ millions) |
|---|---|
| Total assets | 10,150 |
| Defined benefit | 9,800 |
| Thrift or savings | 300 |
| 401(k) | 50 |
| Employer contributions | na |
| Benefit payments | na |
| In-house assets: | |
| Equities | 5,880 |
| Fixed income | 2,940 |
| Short term | 980 |
| Alternative investments: | |
| International equities | 200 |
| Oil and gas | 25 |
| Private placements | 300 |
| Real estate equity | 200 |
| Mortgages | 50 |
| Mortgage-backed securities | 400 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 60 |
| Bonds | 30% |
| Cash equivalents | 10% |

NEW YORK — The USX Corp. pension fund increased 8% to $10.15 billion Sept. 30 from $9.4 billion a year earlier. Defined benefit assets increased 8.9% to $9.8 billion from $9 billion during the same period.

U.S. Trust, Morgan Guaranty and Chase Manhattan serve as custodians for the fund.

Key personnel overseeing the investment management of the fund are Gary A. Glynn, president of the U.S. Steel and Carnegie Pension Fund, John Van Deusen, senior vice president, and Peter C. Lincoln, vice president-investments.

## Utah State Retirement Fund

| | ($ millions) |
|---|---|
| Total assets | 3,246 |
| Defined benefit | 3,246 |
| Employer contributions | 85 |
| Benefit payments | 65 |
| In-house assets: | |
| Equities | 800 |
| Fixed income | 1,100 |
| Other | 100 |
| Passive investments: | |
| Indexed stocks | 500 |
| Alternative investments: | |
| International equities | 42 |
| Venture capital | 15 |
| Real estate equity | 230 |
| Mortgages | 20 |
| Mortgage-backed securities | 90 |
| Hedging devices: | |
| Stock options | Y |
| Asset mix: | |
| Stocks | 46% |
| Bonds | 32% |
| Cash equivalents | 11% |
| Real estate equity | 7% |
| Mortgages | 1% |
| Mortgage-backed securities | 3% |

SALT LAKE CITY — Total employee benefit assets at the Utah State Retirement Fund increased 20.8% to $3.246 billion as of Sept. 30, from $2.688 billion the previous year. Because of the market volatility during October, assets totaled $3.1 billion as of Nov. 1, a drop of 4.5%.

**Equity managers:** Atalanta/Sosnoff; Smoot, Miller & Cheney; Value Line; and Wasatch.

**Real estate manager:** F.I.A.

The master custodian is Chemical Bank; the investment consultant is Mercer-Meidinger-Hansen.

Key personnel overseeing the investment management of the fund are W. Dan Smith, investment officer, and Richard Cherry, assistant investment officer.

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# V

## Virginia Supplemental Retirement Systems

| | ($ millions) |
|---|---|
| Total assets | 7,610 |
| Defined benefit | 7,610 |
| Employer contributions | 613 |
| Benefit payments | 278 |
| Portfolio insurance | 1,521 |
| In-house assets: | |
| Equities | 730 |
| Short term | 755 |
| Other | 11 |
| Passive investments: | |
| Indexed stocks | 2,343 |
| Indexed bonds | 193 |
| Alternative investments: | |
| Real estate equity | 238 |
| Mortgages | 51 |
| Hedging devices: | |
| Stock options | Y |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 59.2% |
| Bonds | 26.9% |
| Cash equivalents | 9.9% |
| Real estate equity | 3.8% |
| Other | 0.2% |

RICHMOND, Va. — Benefit assets of the Virginia Supplemental Retirement System totaled $7.61 billion as of Sept. 30, a 20.9% increase from the $6.296 billion reported a year earlier.

As a result of the market volatility and other factors, assets as of Oct. 31 totaled $6.88 billion, a drop of 9.6%.

**Equity managers:** Ardsley Partners; Bankers Trust; Brignoli Curley & Roberts; Concord; Corinthian; DCM; Delaware Investment; Fidelity Management Trust; GAMCO; Hutson; IDS Advisory; Jundt/Capen; Lincoln; Loomis Sayles; McKenzie Walker; Mellon; Miller Anderson & Sherrerd; Nicholas-Applegate; Pacific Financial Research; Rosenberg Institutional; Schafer; and Donald Smith.

**Fixed-income managers:** Sanford C. Bernstein; Lehman Management; MacKay-Shields; Massachusetts Financial; Merganser; Security Capital; and Sovran Capital.

**Real estate managers:** Equitable Life; Equitable Real Estate; LaSalle; J.P. Morgan; New England Life; Phoenix Mutual; Prudential; and RREEF.

The master custodian is Sovran Bank; the investment consultants are Rogers, Casey & Barksdale and Wilshire.

The key person overseeing the investment management of the fund is Timothy R. Barron, director of investments.

# W

## Washington State Investment Board

| | ($ millions) |
|---|---|
| Total assets | 10,600 |
| Defined benefit | 10,600 |
| Employer contributions | 370 |
| Benefit payments | 494 |
| In-house assets: | |
| Fixed income | 4,900 |
| Short term | 2,700 |
| Passive investments: | |
| Indexed stocks | 2,522 |
| Indexed bonds | 1,470 |
| Alternative investments: | |
| Venture capital | 210 |
| Oil and gas | 100 |
| LBOs | 990 |
| Real estate equity | 340 |
| Mortgages | 196 |
| Mortgage-backed securities | na |
| Hedging devices: | |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 26.8% |
| Bonds | 46% |
| Cash equivalents | 24% |
| Real estate equity | 3.2% |

OLYMPIA, Wash. — The Washington State Investment Board had $10.6 billion in total assets as of Sept. 30, an increase of 30.9% from $8.1 billion the previous year. Because of a reduction in equity assets to 27% in early September, the board reported only an 8.5% loss from October's volatile stock

# Bond portfolios

*Continued from page 13*

banner year in 1987," Mr. Leibowitz said, although statistics on its growth were not available.

Joseph Gorman, president of National Investment Services of America Inc., Milwaukee, said plan executives' increasingly conservative posture is pushing them toward dedications.

But Ken Meyer, executive vice president of Lincoln Capital Management Co., Chicago, said pension executives largely were thinking through the implications of FASB 87 last year, and soon would make a move toward "structured" bond portfolios, such as dollar-duration matching vehicles, which use smaller amounts of more highly levered bonds to insulate against interest rate risk.

American Airlines, Fort Worth, Texas, adopted such an approach last year, dropping its $1.05 billion dedicated portfolio and buying $850 million in longer duration bonds, allowing the company to lock in its pension surplus and minimizing interest rate risks (*P&I Age*, March 9).

Besides American, at least three major dedicated bond portfolios were dropped during 1987. In one of the biggest moves, Chrysler Corp., Detroit, liquidated its $2.1 billion dedicated bond portfolio, shifting the assets to stocks. Before the October crash, however, Chrysler lowered its commitment to stocks to between 30% and 35% from 55%, boosting cash to 30%, said Russ Flynn, manager-pension fund investments.

In addition, Ford Motor Co., Dearborn, Mich., and Honeywell Inc., Minneapolis, unwound their dedicated portfolios that were valued at $400 million and $308 million respectively as of Sept. 30, 1986. Officials at those firms declined to discuss the portfolio liquidations.

The amount of assets held by Top 200 pension funds invested in dedicated or immunized portfolios actually declined in the year ended Sept. 30, slipping to $24.58 billion from $29.35 billion. But this year's data is skewed because several funds with large dedicated bond funds — such as U S WEST Inc. and Westinghouse Electric Corp. — did not supply data on whether those portfolios still are in place. ■

### Dedicated or immunized bond funds among the Top 200
($ millions)

| Fund | Assets |
|---|---|
| Western Conference of Teamsters | 5,530 |
| Ameritech | 2,790 |
| Minnesota State Board of Investment | 2,560 |
| Southwestern Bell | 1,762 |
| General Electric | 1,700 |
| UMWA Health & Retirement Funds | 1,636 |
| Navistar International | 1,584 |
| Bethlehem Steel | 1,367 |
| Caterpillar | 1,004 |
| American Airlines | 750 |
| RJR Nabisco | 477 |
| Armco | 426 |
| Inland Steel Industries | 374 |
| Mobil Oil | 361 |
| Unisys | 329 |
| Union Carbide | 300 |
| Raytheon | 288 |
| AT&T | 266 |
| Hercules | 236 |
| Ohio State Teachers Retirement System | 200 |
| Milwaukee City Employees' Retirement System | 163 |
| Boilermaker Blacksmith National Pension Trust | 110 |
| North American Philips | 93 |
| Eli Lilly | 83 |
| Bakery & Confectionery Union | 80 |
| United Technologies | 60 |
| United Methodist Church | 51 |
| **Total** | **24,580** |

# Rankings

*Continued from page 13*

Those in the top 10 funds were unchanged, although rankings shifted slightly. The Teachers Insurance and Annuity Association — College Retirement Equities Fund, New York, remained first with $66.2 billion; the California Public Employees' Retirement System, Sacramento, was second with $44 billion; General Motors Corp., New York, was third with $49 billion; and the New York State & Local Retirement Systems, Albany, remained fourth with $38.7 billion.

American Telephone & Telegraph Co., New York, with $37.5 billion, moved ahead of the $33.6 billion New York City Retirement Systems; General Electric Co., Stamford, Conn., $27.3 billion remained seventh; and the California State Teachers' Retirement System, Sacramento, $23.3 billion, just passed the New York State Teachers Retirement System, Albany, $23 billion, to rank eighth. IBM Corp., Stamford, Conn., $22.5 billion, remained 10th.

Significant shifts in overall rankings within the Top 200 include: Public School Teachers' Pension and Retirement Fund of Chicago, $3.2 billion, up 26 places to 83rd; The Dow Chemical Co., Midland, Mich., $2.9 billion, up 22 places to 98th; International Paper Co., New York, $2.5 billion, up 29 places to 123rd; and Abbott Laboratories, $1.7 billion, up 29 places to 163rd.

Bethlehem Steel Corp., Bethlehem, Pa., at $2.7 billion, slid 26 places in the rankings to 109th.

One of its woes was negative cash flow; incoming contributions to the plan were $150 million in 1987 while the amount to be paid to workers was $480 million. In addition, more than $150 million of total assets reflects corporate contributions owed to the plan. Bethlehem also maintains a very conservative asset mix, with half of all assets in dedicated bonds and only 35% in stocks as of Sept. 30.

Halliburton Co., Duncan, Okla., with $2 billion in total assets, moved up 56 places to 141st after incorporating the assets of two small subsidiaries — Houston-based Brown & Root Inc. and Highland Insurance Co. — into a master trust in 1987.

Union Carbide's ranking slipped 86 places to 164th, from $3.2 billion to $1.7 billion in total assets, because the assets of a previously terminated plan, which are still managed by Union Carbide, were not included in this year's profile. ■

### Largest union funds
($ millions)

| Fund | Assets |
|---|---|
| Teamsters, Central | 8,482 |
| Western Teamsters | 7,524 |
| UMWA | 4,825 |
| Nat'l Electrical Contractors | 2,770 |
| Boilermaker Blacksmith | 2,230 |
| Bakery & Confectionery | 2,000 |
| Hospital/Health Care | 1,797 |
| Int'l Operating Engineers | 1,718 |
| Plumbers, National | 1,599 |
| Southern California UFCW | 1,463 |
| IAM Nat'l Pension Fund | 1,454 |
| Teamsters, New England | 1,392 |
| **TOTAL** | **37,254** |

market; it had $9.7 billion in assets Oct. 31.

**Equity managers:** Columbia; Hotchkis and Wiley; Mellon Capital; Schafer; Donald Smith; United; and Wells Fargo.

**Real estate managers:** Copley; Equitable; Pacific Mutual; RREEF; and Smith Barney.

The master custodian is Bank of New York; the investment consultant is Frank Russell.

Key personnel overseeing the investment management of the fund are John Hitchman, director, and David Weig, deputy director.

### Westinghouse

| | ($ millions) |
|---|---|
| Total assets* | 4,976 |
| Defined benefit assets | 3,989 |
| Thrift or savings | 987 |
| Employer contributions | na |
| Benefit payments | na |

*From Money Market Directory

PITTSBURGH — Westinghouse Electric Corp.'s employee benefit assets rose 3.7% to $4.976 billion from $4.8 billion in the nine months ended June 30.

According to Money Market Directory, the managers are as follows:

**Equity managers:** Brandywine; Brignoli, Curley & Roberts Associates; Manufacturers Hanover Investment; Pittsburgh National Bank; Provident Capital; and Stralem & Co.

**Fixed-income manager:** MacKay-Shields; Pioneering; and Putnam.

**Real estate managers:** Citicorp; First Chicago; and Mellon.

The master trustee is Mellon Bank; the consultant is Wilshire.

Key personnel overseeing the investment management of the fund are Thomas G. Scannell, director-pension investments; and Edward Goff, director-compensation, benefits and human resources programs.

### State of Wisconsin Investment Board

| | ($ millions) |
|---|---|
| Total assets | 15,632 |
| Defined benefit | 15,632 |
| Employer contributions | 345 |
| Benefit payments | 426 |
| In-house assets: | |
| Equities | 7,231 |
| Fixed income | 5,732 |
| Short term | 2,269 |
| Real estate | 400 |
| Alternative investments: | |
| International equities | 75 |
| International bonds | 75 |
| Venture capital | 35 |
| LBOs | 144 |
| Private placements | 2,379 |
| Real estate equity | 233 |
| Mortgages | 166 |
| Mortgage-backed securities | 544 |
| Hedging devices: | |
| Bond options | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 46% |
| Bonds | 33% |
| Cash equivalents | 15% |
| Real estate equity | 1.5% |
| Mortgages | 1% |
| Mortgage-backed securities | 3.5% |

MADISON, Wis. — The State of Wisconsin Investment Board's total employee benefit assets increased 15.8% to $15.632 billion from $13.5 billion during the 12 months ended Sept. 30.

Key personnel overseeing the investment management of the fund are Marshall Burkes, executive director, and Robert Zobel and James Severance, investment directors.

### The World Bank

| | ($ millions) |
|---|---|
| Total assets | 2,600 |
| Defined benefit | 2,600 |
| Employer contributions | na |
| Benefit payments | na |
| Alternative investments* | |
| International equities | 600 |
| International bonds | 200 |
| Venture capital | 40 |
| LBOs | 40 |
| Private placements | 40 |
| Real estate equity | 80 |
| Mortgage-backed securities | 130 |
| *P&I Age estimates | |
| Hedging devices: | |
| Stock index futures | Y |
| Fixed-income futures | Y |
| Asset mix: | |
| Stocks | 60% |
| Bonds | 20% |
| Cash equivalents | 8% |
| Real estate equity | 3% |
| Mortgage-backed securities | 5% |
| Other | 4% |

WASHINGTON — The World Bank's pension assets increased 18.2% to $2.6 billion as of Sept. 30 from $2.2 billion a year earlier.

According to the Money Market Directory, the fund's managers are as follows.

**Managers:** AIM; Delphi; Fischer, Francis, Trees & Watts; Geewax, Terker; Lincoln Capital; NCNB; Quest Advisory; and State Street Bank.

The master trustees are State Street and Northern Trust; the investment consultants are Strategic Investment Partners and Lewis, Bailey Associates.

Key personnel overseeing the investment management of the fund are Nestor Santiago, pension plan administrator; and Hilda Ochoa, president of Strategic Investment Partners.

Best-managed companies in America: May 2.

X

### Xerox

| | ($ millions) |
|---|---|
| Total assets | 2,734 |
| Profit-sharing | 2,734 |
| Employer contributions | 91 |
| Benefit payments | 294 |
| Passive investments: | |
| GICs | 427 |
| International equities | 268 |
| Venture capital | 10 |
| Oil and gas | 5 |
| Private placement | 10 |
| Real estate equity | 209 |
| Mortgage-backed securities | 14 |
| Stock options | Y |
| Stock index futures | Y |
| Asset mix: | |
| Stocks | 55.2% |
| Bonds | 6.2% |
| Cash equivalents | 14.4% |
| Real estate equity | 7.6% |
| Mortgage-backed securities | 0.5% |
| GICs | 15.6% |
| Other | 0.5% |

STAMFORD, Conn. — Xerox Corp.'s retirement plan assets increased 18% to $2.734 billion as of Sept. 30 from $2.318 billion a year earlier.

The corporation declined to disclose the names of its money managers.

The master trustee is State Street Bank and Trust. Frank Russell Co. and Collins Associates are the plan's consultants.

Key personnel overseeing the investment management of the fund are Robert R. Evans, assistant treasurer; Gerald J. Paolini, manager-trust investment strategy; Jainel Buell, manager-trust investments; and Debra L. Charlesworth, manager-trust analysis.

Investment management fees and revenues: March 7.

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REAL ESTATE

# Funds bolster realty

By Steve Hemmerick

The largest 200 employee benefit funds reported holding $28.039 billion in equity real estate for the year ended Sept. 30, up about 7.1% from $26.181 billion reported the previous 12 months.

Most of the increase in equity real estate assets was reported by public pension funds.

Washington State Investment Board registered one of the biggest increases — 50.4% to $340 million from $226 million.

John Hitchman, executive director of the Washington fund, said the increase comes from recent direct investments with "major developers" in office buildings, shopping centers and industrial properties. Some 134 of the largest 200 employee benefit funds have equity real estate portfolios, but 10 didn't list amounts.

**Top 200**

Of the 124 reporting amounts, the average percentage of the total portfolio invested in equity real estate was 4.8%. The portfolios included equity purchases and participating mortgages, but not straight mortgages or mortgage-backed securities.

Of the total, corporate pension funds reported $12.041 billion in equity real estate; public pension funds, $11.769 billion; union funds, $1.332 billion; and miscellaneous funds, $2.897 billion.

The top four funds, with real estate holdings significantly larger than the other pension funds, reported the following increases: American Telephone & Telegraph Co., New York, reported $3.217 billion in equity real estate, a 20.1% increase over $2.678 billion; Teachers Insurance and Annuity Association College Retirement

*Continued on page 76*

## Top 200 funds investing in real estate equity ($ mils.)

| Fund | Assets |
|---|---|
| AT&T | 3,217 |
| California Public Employees' | 2,241 |
| TIAA-CREF | 1,628 |
| Ohio State Teachers | 1,588 |
| NYNEX | 732 |
| United Nations Joint Staff | 721 |
| Connecticut Trust Funds | 709 |
| Western Teamsters | 640 |
| California State Teachers | 633 |
| Florida State Board | 550 |
| Prudential Insurance | 510 |
| Pennsylvania Public School | 508 |
| Southwestern Bell | 508 |
| Exxon | 427 |
| US WEST | 402 |
| Eastman Kodak | 400 |
| Minnesota State Board | 396 |
| Pennsylvania State Employees' | 392 |
| Washington State Board | 340 |
| Ameritech | 330 |
| Colorado Public Employees' | 330 |
| Shell Oil | 300 |
| Oregon Public Employes | 277 |
| United Technologies | 268 |
| Ohio School Employees | 262 |
| Metropolitan Life | 255 |
| Allied-Signal | 250 |
| Illinois Teachers' | 245 |
| Virginia Supplemental | 238 |
| Wisconsin Investment Board | 233 |
| Utah State Retirement Fund | 230 |
| Nat'l Electrical Contractors | 229 |
| Illinois State Universities | 225 |
| Xerox | 209 |
| Allegis | 200 |
| Boilermaker Blacksmith | 200 |
| Monsanto | 200 |
| USX | 200 |
| Alaska State Retirement | 196 |
| Owens-Illinois | 195 |
| Caterpillar | 194 |
| Ohio Public Employees | 192 |
| Atlantic Richfield | 190 |
| Sun | 178 |
| Illinois State Board | 175 |
| UMWA | 168 |
| Pacific Gas and Electric | 161 |
| Digital Equipment | 157 |
| Iowa Public Employees | 151 |
| Textron | 151 |
| Kansas Public Employees' | 149 |
| New York State & Local | 142 |
| Illinois Municipal | 138 |
| Hawaii State Employees | 135 |
| Nevada Public Employees' | 135 |
| Honeywell | 134 |
| International Paper | 133 |
| Los Angeles County | 130 |
| Hercules | 113 |
| San Francisco Employees | 113 |
| Pension Reserves Investment | 111 |
| RJR Nabisco | 110 |
| Unisys | 109 |
| Minnesota Mining & Mfg. | 108 |
| Ohio Police & Firemen's | 108 |
| Amoco | 102 |
| Maryland State Retirement | 100 |
| Army and Air Force Exchange | 97 |
| Inland Steel Industries | 97 |
| Idaho Public Employee | 93 |
| Grumman | 90 |
| Michigan State | 87 |
| Chicago Municipal Employees | 86 |
| North American Philips | 86 |
| CIGNA | 83 |
| Kentucky Retirement Systems | 82 |
| World Bank | 80 |
| Aetna Life & Casualty | 78 |
| Travelers Insurance | 78 |
| Chrysler | 77 |
| Standard Oil | 73 |
| Dow Chemical | 70 |
| General Foods | 70 |
| K mart | 69 |
| American Stores | 63 |
| United Methodist Church | 62 |
| Goodyear Tire & Rubber | 59 |
| Merck | 59 |
| Bechtel Power | 58 |
| Pacific Lighting | 58 |
| E.I. du Pont de Nemours | 55 |
| S. New England Telephone | 54 |
| Detroit Retirement Systems | 53 |
| Eli Lilly | 48 |
| Union Carbide | 45 |
| IAM National Pension Fund | 44 |
| Houston City | 43 |
| New Mexico Public Employees | 38 |
| Kentucky Teachers' Retirement | 37 |
| Florida Power & Light | 34 |
| GTE | 34 |
| Halliburton | 33 |
| Massachusetts State Board | 30 |
| Raytheon | 30 |
| Southern California UFCW | 30 |
| Presbyterian Church (U.S.A.) | 29 |
| Southern Baptist Convention | 29 |
| Philadelphia Board of Pensions | 27 |
| Tennessee Valley Authority | 25 |
| Teamsters, Central States | 21 |
| New York State Teachers | 20 |
| Southern California Edison | 19 |
| Trans World Airlines | 17 |
| Milwaukee City Employees' | 15 |
| Sears, Roebuck | 12 |
| Armco | 11 |
| Times Mirror | 11 |
| Southern | 10 |
| American Electric Power | 9 |
| Philip Morris | 8 |
| Alabama Retirement System | 4 |
| Baltimore City | 3 |
| Georgia Employees' | 2 |
| Georgia Teachers | 2 |
| Episcopal Church | 1 |
| Aluminum Co. of America | NA |
| Deere | NA |
| Eastern Airlines | NA |
| General Motors | NA |
| Hughes Aircraft | NA |
| ITT | NA |
| New York Life | NA |
| North Carolina Retirement | NA |
| J.C. Penney | NA |
| **TOTAL** | **28,039** |

WRAP-UP

### First allocation made

CHICOPEE, Mass. — The $23 million Chicopee Contributory Retirement System, Chicopee, Mass., made its first real estate investment, allocating $750,000 to a Metropolitan Life Insurance Co., New York, real estate investment contract that guarantees protection of principal and at least a 7.5% annualized rate of return.

The allocation came from cash reserves. No consultant was used.

The fund might invest 5% to 10% of its total assets in real estate in the next several years, although no official allocation target has been set yet, said Norman Ritchott, system supervisor and board member. Any increase in real estate would come from equity investments, which are 35% of the fund's portfolio.

The Met Life contract was a "logical way" to enter real estate because it guarantees a minimum return and provides for greater returns, said Mr. Ritchott. The contract, which calls for investment in a group of pre-selected properties, guarantees investors a minimum return of 7.5% plus 90% of any returns the properties generate of more than 8.5%.

### Consultant hired

JUNEAU, Alaska — The $9 billion Alaska Permanent Fund Corp., Juneau, has hired Institutional Property Consultants Inc.,

*Continued on page 76*

# Second wave coming

**Shuwa Investments Corp. bought the American Broadcasting Cos. building in New York during its first American buying spree, and now is looking to re-enter the U.S. market.**

## Japanese look at new markets

By Steve Hemmerick

Although Japanese investing in U.S. real estate has slowed, a second wave of Japanese purchases is expected to hit interior cities and suburbs where domestic investors have sought refuge from being outbid by the Japanese for properties in large, coastal cities.

Many Japanese investors have pulled back, waiting for stability between the yen and the dollar, evaluating the estimated $6 billion in American properties purchased in 1987 and, perhaps, becoming more price conscious.

But heavy buying is expected again, and this time the American vs. Japanese bidding for properties will accelerate in Chicago; Atlanta; Columbus, Ohio; Seattle; Phoenix; and San Francisco.

Some Japanese investors are waiting for the American dollar to fall to 100 to 110 yen vs. the dollar, said George Kikuta, a partner with Deloitte Haskins & Sells, Los Angeles, who does consulting and accounting work for Japanese firms.

He said the new wave of Japanese investors will include those from successful, non-public, family-run companies in Japan and rich individuals.

The expected broadening of the investment perspective is part of an evolutionary movement, said Robert T. Burke, a principal with AMB Investment Inc., San Francisco, and a consultant to Mitsui Fudosan.

Mr. Burke also noted the Japanese are more sophisticated, more cautious and less inclined to pay high prices.

With the Japanese moving beyond first-tier cities to secondary locations, non-trophy buildings and retail, the result might be lower yields and higher prices for prime real estate in second-tier cities and in suburbs of first-tier cities such as New York, Boston and Los Angeles.

American pensions funds, which Goldman, Sachs & Co. anticipates will invest $100 billion in equity real estate during the next few years, will be bidding for the highest quality real estate that is in short supply.

These American investors say they hope the Japanese will seek the same kinds of returns and drive as hard a bargain as they do.

Because of the dollar-yen impact, said Stephen Rosenthal, a vice president for acquisitions with F.I.A. Associates, Sacramento, Calif., Japanese real estate investors "could come back with a vengeance."

If the dollar begins to rise against the yen during that buying period, Japanese acquisitions could "accelerate," said David Shulman, a director of real estate research with Salomon Brothers Inc., New York.

Rather than buying into a depreciating dollar, which they have done, he said, they will be buying when their American investments rise in value on a currency basis.

When the dollar and yen stabilize, "you are going to see a flood of investment here in America," predicted John Allen, direc-

*Continued on page 76*

# Japanese

*Continued from page 75*

tor of Asian marketing for the real estate services firm Grubb & Ellis, Irvine, Calif.

Blake Eagle, a consultant with Frank Russell Co., Tacoma, Wash., said information from his company's office in Japan indicates the Japanese will be significant long-term investors in U.S. real estate.

Some American institutional investors said they are trying to determine to what extent, if any, Japanese investors have slowed their investing.

As evidence of a slowdown, they point to reports that Shuwa Investments Corp., Los Angeles, had pulled out of negotiations to buy three office buildings in Chicago and one in Boston.

However, Shuwa has showed renewed interest in the real estate market, making the biggest bid for New York real estate since the October market decline.

Shuwa officials signed a letter of intent to acquire 575 Fifth Ave. for about $250 million.

Other Japanese investors reportedly backed off from bidding on the Beverly Hilton Hotel in Beverly Hills, Calif., and there was a perceived slowdown on Japanese investment in properties in New York, in part because of the instability in the securities industry.

"Yes, we are moving more cautiously than before," said an official at Sumitomo Bank and Trust Co. in New York, who gave his name as "Mr. Kumada."

After the currency exchange between the dollar and the yen has stabilized, it is likely Japanese investment "will be more active," he said.

Because of the volatile exchange rate, he said, Sumitomo officials only are discussing, but not acting on, possible U.S. buys, and will purchase mortgages.

He confirmed that Sumitomo is looking at properties in Chicago, San Francisco and Atlanta.

Robert Bannon, an economist with Security Pacific Bank, Los Angeles, who tracks Japanese stock and bond investments, said large Japanese companies or banks can "mechanically" invest in dollars.

Even so, he said, the Japanese at some point have to shift the value of the dollars back into yen and they can either lose or gain value by the currency shift. The "dollar means everything to them," he said.

While there will be new Japanese investors, others that have already invested here will stop, said Grubb & Ellis' Mr. Allen.

He said the Ministry of Finance in Japan has taken a more conservative stance at home on borrowing.

For example, he said, a company might have borrowed up to 75% on property it owns in Japan to invest here.

Because of sharply rising property values in Japan, that company could borrow again on the new value of property it owns for investment here, except for new Japanese pressures against such loans.

When the smaller, first-time investors in U.S. real estate begin investing, they will use Japanese trading companies and banks as intermediaries, said AMB's Mr. Burke.

Among the signs that the Japanese are becoming more interested in price: A spokesman in the New York office of Shuwa Investments said his firm can't find high-quality properties at the right price, yet some investors questioned Shuwa's purchase price of $625 million for the Arco Towers in Los Angeles in 1986.

The Shuwa spokesman also said his firm is willing to go "anyplace" in the United States to get an investment at the right price and is looking at properties in Chicago, San Francisco, Dallas and parts of Florida.

An official in the New York office of Nissei Realty said there is little to recommend to the home office in Japan because of high prices.

He said his firm is broadening its outlook, looking at properties in Chicago and Dallas. ■


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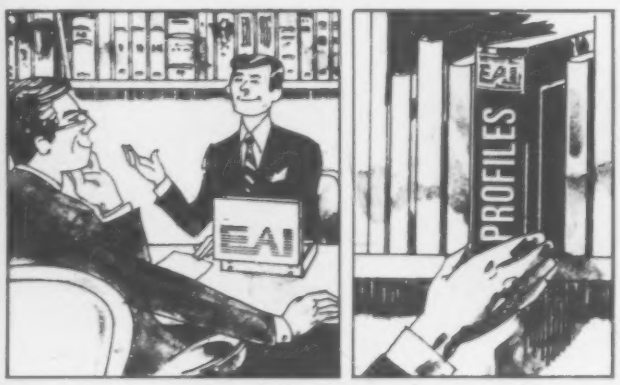


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# Realty up

*Continued from page 75*

Equities Fund, New York, up 27.2% to $1.628 billion from $1.28 billion; the California Public Employees' Retirement System, Sacramento, Calif., up 10.7% to $2.241 billion from $2.025 billion; and Ohio Teachers' Retirement System, up 10.7% to $1.588 billion from $1.434 billion.

A key reason behind the ballooning of the AT&T equity real estate portfolio is its purchase of shares of the Telephone Real Estate Equity Trust from some regional telephone companies desiring to sell them.

The trust, originally valued at $4 billion, was established in January 1984 before the divestiture of the regionals from AT&T. Shares of the trust, which is scheduled to be liquidated after 10 years, can be bought or sold among the trust's membership.

Generally, corporate pension funds are not increasing the percentage of assets in equity real estate, said Blake Eagle, consultant at Frank Russell Co., Tacoma, Wash.

He said many of the large corporate pension funds already have real estate assets target goals of 10% to 15%, and were surprised how quickly they neared or reached those goals after the stock market fall Oct. 19.

He noted many pension funds participated in the buyout by JMB Realty, Chicago, of Cadillac Fairview Corp. Ltd., Toronto, and still show an appetite for quality real estate when it is available.

As for public pension funds, they continue to buy sizable amounts of real estate, according to Ronald Karp, president of Ronald A. Karp Associates, Summit, N.J.

He said he didn't notice an appreciable pull back in real estate purchases after the stock market slump, and public funds that have limitations on stock purchases use real estate as a hedge against inflation.

## WRAP-UP

*Continued from page 75*

Atlanta, as real estate investment consultant, replacing Pension Realty Advisors, San Francisco.

It also appointed Pete Jeans as real estate investment officer replacing Richard Alexander, who retired.

The fund's board may increase its real estate allocation target to 10% from its current 6.5% during allocation strategy meetings scheduled for February, Mr. Jeans noted.

He also said the fund's board was pleased with Pension Realty Advisors, but decided it wanted "fresh blood" in consulting when the firm's three-year contract expired.

Mr. Jeans previously served as director of the about $150 million state loan programs administered by the Alaska Department of Commerce.

### *Blind pool withdrawn*

ALEXANDRIA, Va. — Pension fund aversion to "blind pool" real estate investing forced the J.E. Robert Co., Alexandria, Va., to withdraw from the pension fund fund-raising market a closed-end limited partnership, according to Joseph E. Robert, chief financial officer.

The fund, called J.E.R. Partners, was expected to raise up to $200 million in pension fund investments but was withdrawn.

Mr. Robert said it was pulled back after executives of a "handful" of pension funds said they didn't like its blind pool approach.

No pension commitments had been made.

Blind pools select properties to acquire while they are still in or have already finished their fund raising.

Pre-selected property funds let investors know the properties the manager will acquire before investing.

Although there was always been some aversion to blind pool investing, real estate consultants have said that dislike has increased because of greater investor wariness after October's stock market fall.

They also said pension fund executives want to know what's in the real estate portfolios in which they invest.

J.E.R. Partners, which is underwritten by PaineWebber Inc., New York, will now seek investments from private investors, Mr. Robert said.

## Top 200 funds investing in mortgages ($ mils.)

| Fund | Assets | Funds | Assets | Funds | Assets |
|---|---|---|---|---|---|
| TIAA-CREF | 13,486 | Western Teamsters | 151 | Halliburton | 24 |
| New York State & Local | 2,757 | Nevada Public Employees' | 134 | Atlantic Richfield | 23 |
| California Public Employees' | 2,447 | Kentucky Teachers' | 113 | Baltimore City | 23 |
| New York State Teachers | 1,669 | Int'l Operating Engineers | 103 | Minnesota Mining & Mfg. | 20 |
| Texas Teachers | 1,420 | Union Carbide | 102 | Utah State Retirement Fund | 20 |
| California State Teachers | 1,115 | Nat'l Electrical Contractors | 100 | Aetna Life & Casualty | 19 |
| Michigan State | 1,003 | Bakery & Confectionery | 80 | Travelers Insurance | 17 |
| Alabama Retirement System | 968 | Ohio School Employees | 76 | Pacific Lighting | 12 |
| Ohio State Teachers | 920 | New York City Retirement | 72 | Ohio Police & Firemen's | 10 |
| Colorado Public Employees' | 640 | Idaho Public Employee | 70 | San Francisco Employees | 9 |
| Pennsylvania State Employes' | 484 | Arkansas Teachers | 67 | Georgia Employees' | 8 |
| Pennsylvania Public School | 457 | Honeywell | 60 | New Mexico Public Employees | 4 |
| Oregon Public Employes | 425 | Virginia Supplemental | 51 | United Methodist Church | 3 |
| Hawaii State Employees | 376 | Chicago Municipal Employees | 50 | Chrysler | 2 |
| Detroit Retirement | 375 | USX | 50 | S. New England Telephone | 1 |
| Alaska State Retirement | 265 | Goodyear Tire & Rubber | 41 | Boeing | NA |
| Arizona State Retirement | 229 | Sears, Roebuck | 36 | Hewlett Packard | NA |
| Washington State Board | 196 | Teamsters, Central States | 31 | Missouri School Retirement | NA |
| Los Angeles County | 170 | Southern Baptist Convention | 28 | North Carolina Retirement | NA |
| Wisconsin Investment Board | 166 | Georgia Teachers | 25 | Westinghouse Electric | NA |
| | | | | TOTAL | 31,269 |

**Funds investing in oil and gas among the top 200 ($ millions)**

| Fund | Assets |
|---|---|
| TIAA-CREF | 600 |
| AT&T | 236 |
| Washington State Board | 100 |
| Minnesota State Board | 63 |
| Southwestern Bell | 40 |
| Allied-Signal | 30 |
| Exxon | 29 |
| GTE | 29 |
| Textron | 25 |
| USX | 25 |
| Caterpillar | 18 |
| Ford Motor | 15 |
| Honeywell | 15 |
| Eastern Air Lines | 10 |
| Merck | 10 |
| ITT | 9 |
| United Technologies | 6 |
| Atlantic Richfield | 5 |
| Maine State Retirement | 5 |
| Xerox | 5 |
| Pension Reserves Investment | 3 |
| Monsanto | NA |
| TOTAL | 1,278 |

# Energy ventures boom

**By Fred Williams**

For oil and gas investors among the largest 200 pension funds, the whole was greater than the parts in 1987.

Although individual companies reported only moderate changes in their direct investments in oil and gas programs, total investment by the nation's largest pension funds grew by half.

The total allocation by the 22 funds that reported direct oil and gas investment stood at $1.278 billion as of Sept. 30, an increase of 52.7% from $837 million as of Sept. 30, 1986. But an examination of the 15 funds that appeared on both last year's and this year's lists shows the total value of investments of eight of them decreased while others held steady or increased slightly.

One reason for the decrease could be a change in how the question was worded. The previous survey had asked for assets committed to the investments; this year's survey asked for assets invested.

**Top 200**

Another reason is the market.

Bob Doyle, president of American Energy Reserve Consultants, Houston, said many funds might have taken a writedown in reserve valuations in 1987 reflecting devalued oil and gas properties.

"From 1986 to 1987 you lost a good $1 or $1.20 per thousand cubic feet of gas. In 1985, gas on the Gulf Coast spot market was averaging about $2.50 per (thousand cubic foot). In 1986, it hit a low of about $1.34. My guess is when you get into 1987, they revalued their reserves and came up with a different valuation for their holdings," he said.

Industry sources expect 1988 to be another flat year for energy prices because of soft worldwide demand and uncertainties surrounding the Organization of Petroleum Exporting Countries' pricing strength.

Natural gas prices, on the other hand, are expected to climb through the remainder of 1988 as surplus deliverability shrinks.

The high number of repeat investors on the charts reflect the long-term nature of energy investments.

One newcomer to the list of oil and gas investors is the $10.6 billion Washington State Investment Board, which placed $100 million in a limited partnership in June.

John Hitchman, executive director, said the board invested in the partnership deal developed by Robert Torray, who also is general partner and chairman. Mr. Torray is president and chief investment officer of Robert E. Torray & Co. Inc., an investment management firm in Bethesda, Md.

Called the Energy Recovery Fund, Mr. Hitchman said the focus of the partnership will be on "operating leverage and restructuring rather than on buying oil and gas in the ground." He said the seven-year partnership is expected to provide "superior" returns of between 2 and 2.5 times the returns of the Standard & Poor's 500 stock index.

Leading pension fund investors onto the oil field is the nation's largest fund, the more than $60 billion Teachers Insurance and Annuity Association — College Retirement Equities Fund. Although TIAA-CREF reported an $800 million investment in its survey response, a spokesman said that amount included more traditional fixed-income energy sector holdings. The spokesman estimated $600 million is invested in direct oil and gas programs.

Following TIAA-CREF, is American Telephone & Telegraph Co. AT&T, with an ongoing commitment to oil and gas investments, had been at the top of the list for the past several years, but dropped slightly to $236 million from $247 million a year earlier.

Most of the other companies have reported oil patch investments for several years, with their positions changing only slightly. ■


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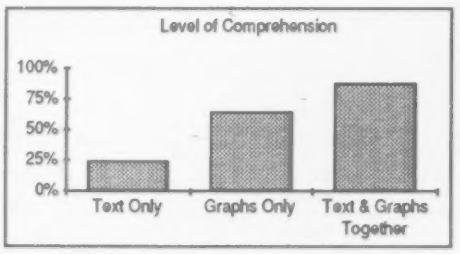


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# Budget law

*Continued from page 2*

companies willing to move into better funding status."

Trade groups representing the auto, steel and telephone industries, public utilities, manufacturers, and pension fund groups lobbied hard on Capitol Hill for the changes, according to congressional aides and trade group officials. Congressional aides heard from the Motor Vehicles Manufacturers Association, ERIC and the National Association of Manufacturers, all Washington-based, among others.

Navistar International Corp., Chicago, and Chrysler Corp., Highland Park, Mich., which are both MVMA members, were among the most vocal corporations. Both faced hard times several years ago when business slumped and, as a result, contributed little or nothing to their pension funds, leaving them underfunded. Recently, they have recovered and are able to resume making contributions or making larger ones. These kinds of companies will benefit most from the new provisions.

"This opens the way for companies with underfunded plans to fully fund their plans without penalty and get the deduction," said Daniel Clemens, director of Navistar's employee pensions.

He said Navistar's unfunded vested liability is about $360 million to $370 million, down from $1.1 billion a few years ago. Mr. Clemens is aiming to eliminate the unfunded liability in three to five years. He said the provisions would go a long way toward helping him accomplish that goal.

Last month, President Reagan signed the Omnibus Budget Reconciliation Law, which contained provisions tightening minimum and maximum funding rules, increasing the annual premium employers must pay to the Pension Benefit Guaranty Corp. and reducing the period over which past service liabilities and experience losses in pension funds can be amortized (*Pensions & Investment Age*, Dec. 28).

The combined effects of the two provisions specifically are targeted to companies with underfunded plans that have been making catch-up contributions so they contribute a large amount in one plan year. Lobbyists for several companies argued on Capitol Hill that if a corporate sponsor is willing to put more into the underfunded plan, Congress should make it easy to do so.

Under prior law, there was a limit to the amount a company could contribute in any given year, after which the contribution no longer would be deductible. But under the new law, a company can contribute up to the unfunded current liability without losing its tax deductions on that amount. Thus, the penalty that existed previously has been eliminated.

"But it still protects taxpayers from subsidizing companies' overfunding their plans because employers lose deductibility for contributions when funding exceeds current liability," Navistar's Mr. Clemens said.

The new variable-rate premium established for the PBGC in the law also is a factor. In general, under the new law a plan sponsor must pay a flat rate of $16 per participant per year, plus an additional $6 for each $1,000 of underfundedness to a $34 cap. That means the total premium could not be more than $50 a head in any given year.

If a company contributed more than the maximum in any plan year during the five years preceding its having to pay the variable premium, the variable portion of the PBGC premium it must pay is reduced to $3 participant. ■


Editorial Index

To obtain the editorial index for Pensions & Investment Age, please contact Debbie Spatafora at (313) 446-0492


The *P&I Age* monthly indexes track the changes in the Standard & Poor's 500, Frank Russell Co.'s Russell 3000 stock index, the Ryan Index of fixed-income securities, the Shearson Lehman Government/Corporate bond index and the Salomon Brothers Broad Investment Grade bond index.

**P&I Age December indexes**

| | Latest mo. | Year to-date | Trailing 12 mos. |
|---|---|---|---|
| S&P 500 | 7.62 | 5.26 | 5.26 |
| Russell 3000 | 7.56 | 2.51 | 2.51 |
| Ryan Index | 1.24 | 0.48 | 0.48 |
| Shearson Lehman Gov't./Corp. | 1.37 | 2.30 | 2.30 |
| Salomon BIG | 1.23 | 2.61 | 2.61 |

Source: Rogers, Casey and Barksdale Inc., and Frank Russell

The figure for the November return of the Russell 3000 in the Dec. 14 issue was incorrect. The number should have been −7.54.

# Top funds

*Continued from page 1*

Following the performance of corporate employee benefit funds were public funds, up 18% to $514.4 billion from $435.9 billion; miscellaneous funds, rising 11.7% to $105 billion from $94 billion; and union funds, increasing 3.6% to $37.3 billion from $36 billion.

Although employer contributions, in the aggregate, declined 0.5% to $40.1 billion, from $40.3 billion, corporate funds accounted for most of the drop.

Benefits paid to retirees during the year totaled $38.2 billion, up 3.5% from $36.9 billion the previous year. A spate of staff reductions and early retirement programs in the corporate community generally slowed the growth of benefit payments.

Among the Top 200 employee benefit funds, defined benefit assets logged the biggest increase in assets, up 18.5% to $984.9 billion as of Sept. 30 from $831.1 billion a year earlier.

Thrift, saving and 401(k) plan assets showed the next largest increase, up 16.4% to $67.6 billion from $58.1 billion, followed by defined contribution plan assets, growing 13% to $104.2 billion from $92.2 billion, and profit-sharing plan assets, up 9.8% to $19.1 billion from $17.4 billion.

For the first time in 1987, *P&I Age* surveyed pension funds on the extent to which they use private placements as an investment. As of Sept. 30, 44 pension funds reported having $19.6 billion invested in private placements.

The number of pension funds among the Top 200 using bond index funds increased to 41 from 32, boosting the total assets invested in such funds 226.1% to $45 billion from $13.8 billion. Of the assets invested in bond index funds, $2.7 billion, or 6%, was managed internally.

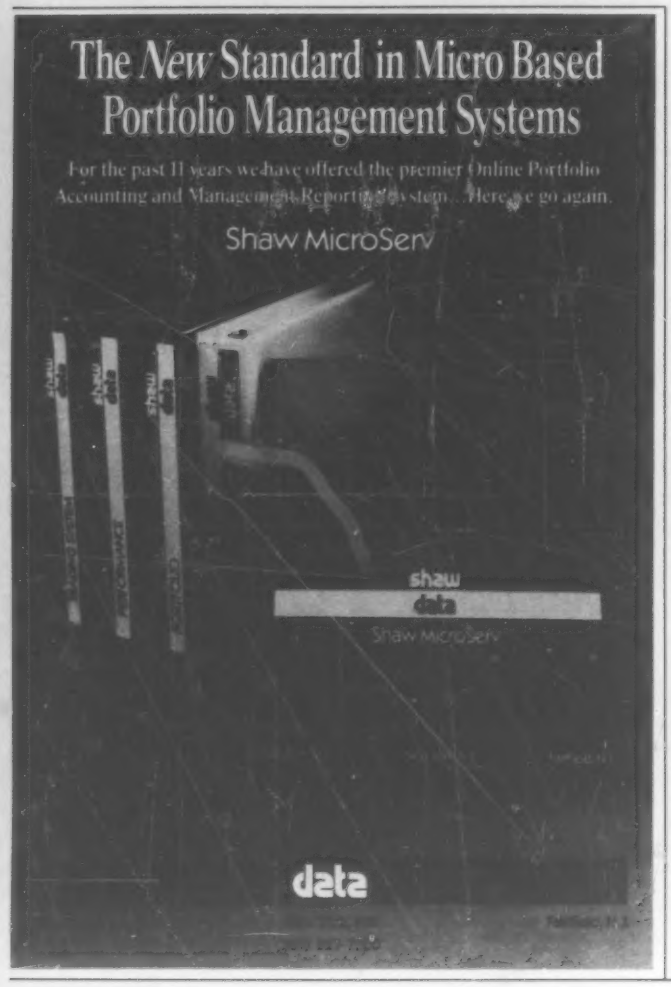
The number of pension funds using stock index funds increased to 105 from 100 as of Sept. 30, increasing the total assets invested 29.8% to $141.3 billion from $108.9 billion. Of the $141.3 billion in stock index funds, $63 billion, or 44.6%, was run internally.

As of Sept. 30, 14 fewer pension funds, or a total of 48, were using GICs, decreasing the total assets invested that way 16.2% to $8.8 billion from $10.5 billion.

As of the same date, 10 fewer pension funds among the Top 200 reported using dedicated or immunized bond portfolios, lowering the total assets invested in these portfolios 16.3% to $24.6 billion from $29.4 billion. But several funds with large dedicated bond funds did not supply data on whether those portfolios are still in place (*See story on page 13*).

Among the various hedging strategies, nine more pension funds, or 72, reported using stock index futures during 1987 and three additional pension funds, or 65, used stock options. In contrast, three fewer pension funds reported using fixed-income options during 1987, for a total of 19; 46 funds used fixed-income futures.

Six fewer pension funds, or a total of 13, said they used portfolio insurance during 1987. The total assets covered by this strategy declined 15.1% to $7.3 billion as of Sept. 30, down from $8.6 billion a year earlier. ■




**Largest miscellaneous funds ($ millions)**

| Fund | Assets |
|---|---|
| TIAA-CREF | 66,171 |
| University of California | 11,228 |
| United Nations Joint Staff | 7,428 |
| Illinois State Universities | 3,016 |
| United Methodist Church | 2,957 |
| World Bank | 2,600 |
| Tennessee Valley Authority | 2,574 |
| Presbyterian Church (U.S.A.) | 2,122 |
| Southern Baptist Convention | 2,061 |
| National Rural Electric | 2,048 |
| Episcopal Church | 1,488 |
| Army and Air Force Exchange | 1,305 |
| TOTAL | 104,998 |

**Largest defined benefit plans ($ millions)**

| Fund | Assets |
|---|---|
| California Public Employees' | 44,036 |
| New York State & Local | 38,747 |
| General Motors | 34,900 |
| New York City | 32,104 |
| AT&T | 30,838 |
| California State Teachers | 23,714 |
| New York State Teachers | 23,035 |
| General Electric | 22,100 |
| IBM | 20,101 |
| N.J. Div. of Investment | 19,570 |
| Texas Teachers | 18,930 |
| Michigan State | 16,073 |
| Ford Motor | 15,700 |
| Wisconsin Investment Board | 15,632 |
| Ohio Public Employees | 14,985 |
| Ohio State Teachers | 14,821 |
| Florida State Board | 13,700 |
| North Carolina Retirement | 12,446 |
| E.I. du Pont de Nemours | 12,300 |
| Pennsylvania Public School | 12,021 |
| NYNEX | 11,966 |
| Ameritech | 11,157 |
| Washington State Board | 10,600 |
| University of California | 10,329 |
| Bell Atlantic | 9,974 |
| TOTAL | 489,779 |

**Largest defined contribution plans* ($ millions)**

| Firm | Assets |
|---|---|
| TIAA-CREF | 66,200 |
| AT&T | 5,897 |
| Sears, Roebuck | 5,267 |
| General Motors | 4,900 |
| General Electric | 4,700 |
| Lockheed | 4,480 |
| E.I. du Pont de Nemours | 4,159 |
| Exxon | 3,933 |
| Shell Oil | 3,611 |
| Procter & Gamble | 3,411 |
| Colorado Public Employees' | 3,002 |
| United Technologies | 2,902 |
| Xerox | 2,734 |
| NYNEX | 2,370 |
| Chevron | 2,229 |
| Boeing | 2,166 |
| Halliburton | 2,023 |
| Allied-Signal | 2,000 |
| Mobil Oil | 1,900 |
| Rockwell International | 1,800 |
| BellSouth | 1,686 |
| Eastman Kodak | 1,621 |
| Hughes Aircraft | 1,600 |
| Texas Municipal | 1,600 |
| J.C. Penney | 1,584 |
| TOTAL | 137,775 |

* Includes profit-sharing, thrift/savings and 401(k) plans.

**Funds investing in private placements among the Top 200 ($ millions)**

| Fund | Assets |
|---|---|
| TIAA-CREF | 7,500 |
| Wisconsin Investment Board | 2,379 |
| Teacher Retirement System of Texas | 2,189 |
| California Public Employees' Retirement System | 1,000 |
| Michigan State | 1,000 |
| Alabama Retirement System | 939 |
| AT&T | 716 |
| California State Teachers Retirement System | 553 |
| New York State Teachers Retirement System | 373 |
| Teamsters, Central States | 349 |
| Detroit Retirement Systems | 343 |
| USX | 300 |
| North Carolina Retirement Systems | 286 |
| Florida State Board of Administration | 255 |
| Honeywell | 213 |
| Minnesota Mining & Manufacturing | 200 |
| Georgia Teachers Retirement System | 167 |
| Goodyear Tire & Rubber | 152 |
| Colorado Public Employees' Retirement | 150 |
| Los Angeles County | 143 |
| Army and Air Force Exchange Service | 123 |
| San Francisco Employees Retirement System | 86 |
| Textron | 75 |
| New Jersey Division of Investment | 50 |
| Atlantic Richfield | 49 |
| World Bank | 40 |
| Travelers Insurance | 35 |
| Los Angeles Department of Water and Power | 29 |
| Maine State Retirement System | 28 |
| Southern New England Telephone | 28 |
| New Mexico Public Employees Retirement | 23 |
| Louisiana State Employees' Retirement System | 18 |
| Indiana Public Employees' Retirement Fund | 15 |
| E.I. du Pont de Nemours | 13 |
| Ohio State Teachers Retirement System | 13 |
| Armco | 10 |
| Union Carbide | 10 |
| Xerox | 10 |
| CIGNA | 9 |
| Idaho Public Employee Retirement System | 9 |
| Commonwealth Edison | 7 |
| Tennessee Consolidated Retirement System | 7 |
| Pension Reserves Investment Management Board | 5 |
| Chrysler | 2 |
| Ohio Police & Firemen's Disability & Pension | 1 |
| Total | 19,902 |

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# Venture capital holds on

## Investments keep flowing at steady pace

By Trudy Ring

Venture capital investors among the nation's largest pension funds charted a steady course in 1987, but 1988 might hold some changes.

The amount of assets, $2.91 billion, that the funds reported in venture capital was down 12.7% from 1986, but that appears to be a difference in reporting rather than an actual decrease in assets.

**Top 200**

In 1987, funds were asked specifically for assets invested in venture capital; in 1986, some reported dollars invested but others reported commitments that were not yet funded.

Also, in 1986 some put leveraged buy-out investments in the same category as venture capital.

In addition, several funds that had substantial amounts in venture capital in 1986 declined to provide the information for 1987. Overall, 66 of the Top 200 funds reported venture capital investments in 1987, down from 75 in 1986.

The numbers for both years exclude the General Electric Co. pension fund, Stamford, Conn., which has substantial venture capital investments but groups them with other alternative investments in the *Pensions & Investment Age* survey.

The $37.5 billion American Telephone & Telegraph Co. pension fund, New York, reported the biggest amount in venture capital, $383 million, up from $316 million in 1986.

This increase is just what AT&T had planned, said Tom Judge, division manager in AT&T's investment management organization.

"We go at this in what we perceive to be a prudent fashion, not in a hurry," he said.

AT&T will add to its venture capital investments in 1988 if good opportunities are available, he said.

The $11 billion GTE Corp. pension fund, Stamford, Conn., increased its venture investments substantially, to $182 million from $92 million. This came about as a result of funding previous commitments, said John Carroll, president of GTE Investment Management Corp.

As for venture capital activity in 1988, Mr. Carroll said, "We never say never."

1988 might be a good year for pension funds to be active in venture capital, as good deals might be available at bargain prices. Some funds, however, might shy away because the market for initial public offerings became so tight after the Oct. 19 stock market plunge.

Mr. Judge agreed the IPO market is a negative for venture capital, but the lower prices at which deals likely will be available is a plus.

"I suspect one area that will be put on the back burner is venture capital," said John Hitchman, executive director of the $10.6 billion Washington State Investment Board.

Mr. Hitchman stressed he is speaking about other funds here; the Washington board, whose venture capital investments grew to $210 million in 1987 from $190 million in 1986, will continue seeking deals in that area, as there likely will be good values available. ■


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### Top 200 funds investing in venture capital ($ mils.)

| Fund | Assets | Fund | Assets | Fund | Assets |
|---|---|---|---|---|---|
| AT&T | 383 | Ohio Public Employees | 35 | Minnesota Mining & Mfg. | 13 |
| Washington State Board | 210 | Wisconsin Investment Board | 35 | Pension Reserves Investment | 13 |
| Michigan State | 196 | Chrysler | 33 | Ohio Police & Firemen's | 12 |
| GTE | 182 | Unisys | 33 | Army and Air Force Exchange | 11 |
| US WEST | 161 | Allied-Signal | 30 | Armco | 10 |
| University of California | 111 | Dow Chemical | 30 | Xerox | 10 |
| Minnesota State Board | 86 | General Foods | 30 | Eli Lilly | 9 |
| Sears, Roebuck | 71 | TRW | 28 | Iowa Public Employees | 9 |
| Oregon Public Employes | 67 | Massachusetts State Board | 27 | Prudential Insurance | 9 |
| Ameritech | 65 | American Electric Power | 26 | Digital Equipment | 7 |
| Honeywell | 62 | Chicago Municipal Employees | 24 | Unocal | 7 |
| New York State & Local | 61 | NYNEX | 24 | Inland Steel Industries | 5 |
| Exxon | 55 | RJR Nabisco | 24 | Nevada Public Employees' | 5 |
| United Technologies | 54 | Delta Air Lines | 20 | Merck | 4 |
| Detroit Retirement Systems | 52 | Grumman | 20 | Philadelphia Board of Pensions | 3 |
| Pennsylvania State Employes' | 52 | Ohio State Teachers | 20 | Times Mirror | 3 |
| Ford Motor | 50 | Ohio School Employees | 19 | National Rural Electric | 2 |
| E.I. du Pont de Nemours | 45 | Southern California Edison | 19 | Aluminum Co. of America | NA |
| Illinois Teachers' | 43 | Southwestern Bell | 19 | Boeing | NA |
| Atlantic Richfield | 42 | Standard Oil | 19 | Deere | NA |
| Pennsylvania Public School | 42 | Illinois Municipal | 16 | Hewlett Packard | NA |
| World Bank | 40 | Utah State | 15 | Hughes Aircraft | NA |
| Los Angeles County | 39 | Pacific Lighting | 14 | Presbyterian Church (U.S.A.) | NA |
| New York State Teachers | 36 | Illinois State Board | 13 | Westinghouse Electric | NA |
| | | | | **TOTAL** | **2,910** |

# Market crash

*Continued from page 1*

centage of the stock universe, he concluded, "To do good, asset mix is the key. . . . If a fund was either equally weighted in stocks and bonds or overweighted in bonds, it did pretty good."

Not surprisingly then, funds with the lowest stock allocations — generally public and union funds — lost much less money than the mainly corporate funds that were heavily weighted in stocks:

- The $7.524 billion Western Conference of Teamsters Pension Trust, Seattle, fared the best among the 66 funds surveyed, down 1.3% between Oct. 1-31. The Western Teamsters had only 11.4% in stocks, and 80.1% in the broad fixed-income category (including 55.9% in bonds and 22% in annuities).

Alan D. Biller, the fund's consultant, attributed the Western Teamsters' performance in October to decisions made years ago to set up large dedicated bond portfolios. "They were properly designed so they didn't fall apart in the face of interest-rate declines" and calls," he said.

"Going into this year, we knew stocks were overvalued, but the fund takes a long-term view. So even while we were buying stocks, we maintained a very large real estate position (8.5% of assets) and didn't run down the bond holdings."

In October, as it turned out, "we were lucky," Mr. Biller said.

- The $1.663 billion defined benefit plan at Union Carbide Corp., Danbury, Conn., which lost only 1.9% in October, was the second-best performer among the 66 surveyed and the only corporate fund to rank in the top third. Union Carbide had 28% in stocks, but 72% in fixed income, of which 58% was in bonds.

Carbide's low equity exposure is deliberate: Fund officials decided the amount in equities would be no greater than its pension surplus, with the liabilities covered by fixed income. To protect earlier equity gains, bond durations were extended beginning in August, reaching a maximum of 2½ to three years beyond liabilities by October. (They've since been reduced to about 1½ years.)

"Even though we got hurt, (Carbide's stock loss) was almost entirely offset by the rise in the bond portfolio," said Michael F. Hoben, president of Benefit Capital Management. Corp., Carbide's in-house asset management arm.

- The $12.446 billion North Carolina Retirement Systems, Raleigh, which lost 2.7% in October, had just 23% of its assets in stocks, but 61% in bonds and 15% in mortgage-backed securities.

C. Douglas Chappell, deputy treasurer/director of the state's investing and banking division, attributed his fund's performance solely to its asset mix. Although the equity exposure hasn't moved above its Sept. 30 level of 23%, Mr. Chappell said, "We're not afraid to make some equity commitments."

By contrast, Northrop Corp., Los Angeles, whose defined benefit assets declined 16.7% in value, had 70% of its $2.519 billion in stock.

Similarly, assets of the $2.624 billion defined benefit plan of Pacific Gas and Electric Co., San Francisco, dropped 16.2%; PG&E had 74% of its assets in stocks. ■


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# Insurance

*Continued from page 2*

inquiries, but we're not getting new clients" for portfolio insurance, said Gene Brody, director of options management at Oppenheimer Capital Corp., New York. Oppenheimer's portfolio insurance assets declined to $900 million from $1.5 billion.

During the Oct. 19 market crash, most portfolio insurers had trouble executing dynamic hedging, the predominant form of portfolio insurance in which the manager sells futures short to create a synthetic put option to protect the underlying portfolio's value.

Difficulties in the futures markets during the plunge have led some to conclude that a portfolio insurance strategy relying solely on futures is unreliable.

"Under the conditions it was needed most, it didn't work," said Edgar Peters, senior portfolio analyst-structured investment products, The Boston Co. Inc., Boston.

Boston Co. moved most of the $300 million it had under portfolio insurance to different strategies, such as tactical asset allocation.

Mr. Peters is urging clients that want portfolio insurance to use actual put options, rather than a synthetic put strategy, as options' cost and level of protection provided are known up front. Still, the firm suggests this only for short-term hedging, he said.

Others touting the use of actual put options for portfolio insurance are Drexel Burnham Lambert Inc.'s Chicago office, which saw its assets under this strategy grow to $3 billion from $2 billion in the fourth quarter, and Northern Trust Co., Chicago, which saw its assets grow to $250 million from $150 million.

"With the put, you get exactly what you purchased ahead of time," said Brian Bruce, manager-new products and systems at Northern Trust.

Others contend an options-based strategy could be too costly. "If you can buy the long-term puts at a reasonable price — which I don't think you can — it's reasonable," Mr. Brody said. Some managers buy a series of short-term puts to replicate a longer one, while others use long-term options.

Mr. O'Brien, whose firm pioneered dynamic hedging, said options use might give some clients more protection than they need, but could be appropriate for others.

In either a futures or options strategy, the cost of portfolio protection is going to be higher from now on, because of increased stock market volatility, predicted Jeffrey Geller, vice president of BEA Associates Inc., New York. There likely will be greater use of listed options because of their more precise cost, he said.

BEA had $350 million in portfolio insurance as of Dec. 31, down from $1.2 billion three months earlier; most of these clients have gone into other types of hedging strategies offered by BEA, Mr. Geller said.

The futures-based strategy has its defenders. "We still believe it's a viable strategy, although there are some questions in the marketplace there weren't before Oct. 19," said Jim Carder, president of Westridge Capital Management Inc., Los Angeles. Westridge manages about $40 million in the strategy, unchanged from Sept. 30.

"Most of our clients are very, very pleased with the results they're getting," said Pete Thomas, vice president of Skye Investment Advisors Inc., Cupertino, Calif. Like clients of many portfolio insurers, they will miss their target return somewhat, but will be better off than if they were not hedged at all in 1987, he said. Skye's portfolio insurance assets declined to $646 million from $813 million in the fourth quarter; the two clients that left said it was a market-timing decision.

Mr. O'Brien said from Jan. 1 through Oct. 19, the average LOR account returned about five percentage points more than it would have without the hedge. This was three or four percentage points below where the return should have been, but well within expectations given the market's volatility, he said.

Some managers that use futures also have the choice of selling the securities in the underlying portfolio to cut off the downside — a strategy that could become increasingly important. "I view using the underlying assets as an important safety valve," said Jon Jankus, director of investments at Webster Capital Management, New York. Its $80 million in this strategy at year end was the same as at the end of the third quarter.

Aetna Life & Casualty Co., Hartford, Conn., which had $17 billion in futures-based portfolio insurance Sept. 30, had $3 billion Dec. 31, largely in strategies focusing on the cash securities. Clients in the futures-based strategy discontinued their programs at Aetna's urging because of the undependability of the futures markets in October, said Ralph Tate, vice president.

Bankers Trust Co. — Investment Management Group, New York, which had the authority to move in the cash markets in most of its portfolio insurance accounts, met its goals in those accounts even in the October market (*P&I Age*, Nov. 2). Still, some clients discontinued portfolio insurance; Bankers Trust had $1 billion in the strategy at year end, down from $4 billion Sept. 30.

Managers focusing on bond portfolio insurance, such as Lotsoff Capital Management, Chicago, and Aegis Capital Management, New York, said the strategy worked well with a mix of options and futures.

Lotsoff estimated its insured accounts will return 8.5% for 1987 (final figures aren't in yet), while the Shearson Lehman Government/Corporate bond index returned 2.3%.

Thomas Zucosky, president of Aegis, said bond portfolio insurance didn't suffer the same problems in October as its equity counterpart because of the great liquidity in Treasury bond futures and options on those futures. Their volume is even greater than that of S&P 500 stock index futures.

Lotsoff had $121 million in portfolio insurance as of Dec. 31, up from $75 million a quarter earlier; Aegis Capital had $60 million, up from $55 million.

Stephen Bossu, senior vice president of Lotsoff, said equity portfolio insurance managers might have underestimated the cost.

In addition, no one foresaw how portfolio insurance would perform in a rapidly falling stock market. "There may be conditions under which it is more or less implementable and it may be more or less implementable in different vendors' hands," Mr. Grauer said.

Analyzing the rapidly falling market of Oct. 19, the Brady Commission has called portfolio insurance a major factor in the plunge, predictably angering vendors.

It also said a feature of the crash was aggressive stock selling by arbitrageurs and others in anticipation of portfolio insurance trades.

A solution to this kind of "front running" would be allowing portfolio insurers to do "sunshine trades," announcing their intentions in advance, Mr. O'Brien said.

"I think that will permit the market to anticipate these trades and handle them the way they ought to be handled," he said.

"If the whole world knows what a portfolio insurance program is going to do, no one can really front-run it."

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# Venture cap

*Continued from page 1*

stocks has come about since the October market plunge. Much of the activity has come from pension funds and money managers that had the companies in their venture capital portfolios when they were still private.

"Who better than venture people understand the needs of some of these companies?" said John C. Baker, vice president of Alan Patricof Associates Inc., a venture capital manager of $500 million, about half from tax-exempt investors. "Venture firms, as a rule, are reasonably good judges of value."

Pension officers apparently agree. The $10.6 billion Washington State Investment Board, Olympia, has modified its venture capital partnership agreements to allow them to buy stocks of companies that were part of the portfolio before they went public, said John Hitchman, executive director. The partnerships made some such purchases in October and November, he said, declining to identify the stocks. Washington has $210 million invested in venture capital partnerships.

The $37.5 billion American Telephone & Telegraph Co. pension fund, New York, is allowing its venture capital manager to buy additional small-cap stocks in a portfolio of the stock distributions AT&T receives from venture partnerships, said Tom Judge, division manager in AT&T's investment management organization.

Manufacturers Hanover Investment Corp., New York, runs the portfolio, which has about $20 million in public securities. Overall, MHIC manages about two-thirds of AT&T's $383 million venture capital investments; AT&T runs the rest in-house.

Allied-Signal executives, experienced at both venture capital and equities management, have bought several small-cap companies lately, Mr. Tokar said. "There are just some wonderful values out there," he said.

When stocks were selling at 30 times earnings, venture investors looked at the public market primarily as an exit, Mr. Baker said. Now, with price-earnings ratios substantially lower, they are starting see it as an entrance.

Also, many small-cap companies are priced low not only in relation to earnings but also in relation to cash flow, making them attractive takeover candidates, he said. Venture capitalists could emerge as "white knights," Mr. Baker said.

Some investors see values available across the board in small-cap companies. "You could take your pick," said Mr. Tokar, who declined to list individual stock picks because there are so many of them.

Others are focusing on individual industries. Mr. Baker favors technology companies: "My sense is the number of opportunities there may pick up."

First Chicago Investment Advisors' First Post-Venture Fund has more investments in technology than in other industries, but the fund is far from being technology only, said Alvin W. Marley, vice president.

The fund, which invests in companies with market capitalizations of $10 million to $100 million, holds such stocks as **Software Publishing Corp.** and **MSI Data Corp.**, both in technology, but also has issues like **Regal-Beloit Corp.**, a machine-tool maker, **Guaranty National Corp.**, an auto insurer, and **Murray Ohio Manufacturing**, a maker of bicycles and lawn mowers.

Launched in December 1986, the fund has drawn $60 million in commitments from tax-exempt investors, indicating acceptance of what Mr. Marley calls "minicap" investing. "I believe it's a conservative alternative to venture capital."

Mr. Baker said Alan Patricof Associates hasn't discussed public market opportunities extensively with its limited partners, but expects them to accept these ventures as part of the evolution of venture capital investing. "It behooves us as fiduciaries to take advantage and look at a wider range of opportunities," he said.

Mr. Baker acknowledged public-market investments usually bring in lower returns than traditional venture capital. "But it's still a superior return with far lower risk," he said.

Most small-cap stocks did not produce good returns in 1987; an index of about 3,000 such issues that Wilshire Associates, Santa Monica, Calif., tracks for First Chicago was down 12.6%, Mr. Marley said. (He noted the First Post-Venture Fund beat that index with a positive return of 2.9%.) The large-cap Standard & Poor's 500 stock index was up 5.2% for the year.

The poor returns for 1987, however, indicate to some investors this is the time to get into small-cap issues.

"The true value buyer is recognizing once again that there is good value in this minicap segment of the marketplace," Mr. Marley said.

Mr. Hitchman added, "Once this market emerges from its bear posture, I think the smaller-cap stocks will emerge as the great performers they did in '75." ■

# Funds keep global perspective

**By Marlene Givant**

**Top 200**

International investments of the Top 200 pension funds increased 30.4% in the year ended Sept. 30, with several funds dramatically changing their exposure to the area.

International assets totaled $31.896 billion in the 1987 survey vs. $24.465 billion the previous year.

In many cases, the size of the funds' investments abroad was either sheared or doubled in the period between Sept. 30, 1986, and Sept. 30, 1987.

Of the funds that joined the list in 1987, several — including the $6.182 billion Arizona State Retirement System, Phoenix, and the $3.311 billion Kansas Public Employees' Retirement System, Topeka — made their first commitments to international during the period. In other cases, funds had been investing internationally but hadn't ranked among the Top 200. Examples include the $1.305 billion Army and Air Force Exchange Service, Dallas, with $142 million invested internationally, and the $1.377 billion Merck & Co. Inc. plan, Rahway, N.J., with $91 million in international assets.

Many of the 18 funds that dropped off the list since last year still invest overseas but did not meet the Top 200 cutoff in terms of total fund assets. One example is FMC Corp., Chicago, with $65 million in international assets.

A few funds on the list have international exposure only through the investments of a domestic manager. And international assets of several funds were not included because the companies did not supply information.

Because of the 45.5% rise in the Morgan Stanley Capital International Europe Australia Far East index during the period, a fund with the same exposure or even a 25% higher exposure than the previous year's probably lowered its international allocation in 1987. Often, funds did so to return to target allocations.

"We have been taking profits in that sector (international equities) all year long. We would not expect to reduce that allocation any further and an increase is not in the foreseeable future," said Jay Burden, manager-fixed income investments of the $4.1 billion pension fund of Allied-Signal Co., Morristown, N.J. He added, however, the fund is considering investing in international bonds.

International assets of 12 funds — the $3.189 billion City & County of San Francisco Employees; $6.132 billion Tennessee Consolidated Retirement System, Nashville; $4.423 billion Caterpillar Inc., Peoria, Ill.; $3.536 billion Illinois Municipal Retirement Fund, Chicago; $2.676 billion General Foods Corp., White Plains, N.Y.; $2.06 billion Southern California Edison Co., Rosemead; $11.228 billion University of California, Berkeley; $2.948 billion Detroit Retirement Systems; $1.611 billion American Stores Co., Salt Lake City; $15.632 billion State of Wisconsin Investment Board, Madison; $1.946 billion Standard Oil Co., Cleveland; and $3.56 billion Pacific Gas & Electric Co., San Francisco — increased more than 100% during the 12 months while assets of 14 funds were level or decreased.

Assets invested in international fixed income increased 5.5% to $4.529 billion from $4.294 billion the previous year. The vast majority of bond investors also had international equities.

Funds dropped out of the list for various reasons. The $13.7 billion Florida State Board of Administration, Tallahassee, which had a small exposure to international through a domestic manager in 1986, had no international exposure as of Sept. 30. But the fund soon will fund the two international managers it appointed in February 1986.

Florida has decided to fund Nomura Capital Management, and J.P. Morgan Investment Inc., both of New York, contingent on the results of an internal analysis of risk, asset allocation and other considerations, said Cliff Hinkle, executive director. ■

## Funds investing overseas among the Top 200 ($ mils.)

| Fund | Total | Equities | Fixed |
|---|---|---|---|
| United Nations Joint Staff | 3,686* | 2,070 | 953 |
| TIAA-CREF | 3,231 | 3,131 | 100 |
| General Electric | 1,900* | 1,300 | 500 |
| GTE | 1,810 | 1,501 | 309 |
| AT&T | 1,771 | 1,771 | |
| E.I. du Pont de Nemours | 1,167 | 429 | 738 |
| US WEST | 885 | 885 | |
| Ameritech | 875 | 750 | 125 |
| Prudential Insurance | 801 | 664 | 137 |
| World Bank | 800 | 600 | 200 |
| United Technologies | 769 | 485 | 284 |
| Oregon Public Employes | 767 | 767 | |
| Atlantic Richfield | 644 | 573 | 71 |
| Illinois Teachers' Retirement | 526 | 451 | 75 |
| Arizona State Retirement System | 503 | 503 | |
| Hawaii State Employees | 477 | 477 | |
| San Francisco Employees | 476 | 241 | 235 |
| Tennessee Consolidated | 445 | 283 | 162 |
| Caterpillar | 430 | 430 | |
| Owens-Illinois | 396 | 330 | 66 |
| Illinois Municipal Retirement Fund | 393 | 303 | 90 |
| Exxon | 341 | 341 | |
| Alaska State Retirement System | 332 | 332 | |
| American Stores | 325 | 325 | |
| Allied-Signal | 300 | 300 | |
| Monsanto | 300 | 300 | |
| Southwestern Bell | 279 | 279 | |
| Pension Reserves Investment | 274 | 274 | |
| Xerox | 268 | 268 | |
| Amoco | 262 | 262 | |
| Sears, Roebuck | 248 | 248 | |
| Sun | 242 | 242 | |
| Honeywell | 234 | 141 | 93 |
| Delta Air Lines | 220 | 220 | |
| Bechtel Power | 213 | 187 | 26 |
| Illinois State Universities | 211 | 211 | |
| TRW | 206 | 206 | |
| ITT | 205 | 205 | |
| NYNEX | 203 | 203 | |
| USX | 200 | 200 | |
| Hercules | 181 | 181 | |
| Southern New England Telephone | 181 | 181 | |
| Pacific Gas and Electric | 179 | 179 | |
| American Airlines | 175 | 125 | 50 |
| Dow Chemical | 175 | 175 | |
| Unisys | 173 | 173 | |

| Fund | Total | Equities | Fixed |
|---|---|---|---|
| Minnesota Mining & Manufacturing | 172 | 172 | |
| National Rural Electric | 163 | 163 | |
| Wisconsin Investment Board | 150 | 75 | 75 |
| Florida Power & Light | 147 | 147 | |
| Army and Air Force Exchange | 142 | 114 | 28 |
| Philip Morris | 134 | 134 | |
| Inland Steel Industries | 131 | 131 | |
| Standard Oil | 131 | 131 | |
| Kansas Public Employees' | 127 | 112 | 15 |
| Kraft | 125 | 125 | |
| Travelers | 113 | 113 | |
| Presbyterian Church (U.S.A.) | 96 | 91 | 5 |
| Merck | 91 | 70 | 21 |
| North American Philips | 87 | 87 | |
| General Foods | 82 | 82 | |
| Southern California Edison | 77 | 77 | |
| Unocal | 75 | 75 | |
| Halliburton | 68 | 61 | 7 |
| Houston City | 66 | 66 | |
| Aetna Life & Casualty | 65 | 65 | |
| Eli Lilly | 60 | 60 | |
| Armco | 51 | 51 | |
| Chicago Municipal Employees | 51 | 51 | |
| New York City Retirement | 51 | 51 | |
| Tennessee Valley Authority | 51 | | 51 |
| Louisiana Teachers | 50 | 50 | |
| Massachusetts Board of Retirement | 50 | | 50 |
| Nevada Public Employees' | 50 | 50 | |
| Commonwealth Edison | 47 | 34 | 13 |
| Pacific Lighting | 46 | 46 | |
| CIGNA | 45 | 45 | |
| Pan American World Airways | 45 | 45 | |
| Utah State Retirement Fund | 42 | 42 | |
| Episcopal Church Pension Fund | 40 | 40 | |
| Illinois Board of Investment | 40 | 40 | |
| International Paper | 40 | 40 | |
| University of California | 39 | 39 | |
| Southern Baptist Convention | 32 | 32 | |
| RJR Nabisco | 30 | 30 | |
| Chrysler | 27 | 27 | |
| Mobil Oil | 23 | 23 | |
| Detroit Retirement Systems | 22 | 15 | 7 |
| Trans World Airlines | 20 | | 20 |
| Pennsylvania Employees' | 12 | | 12 |
| Goodyear Tire & Rubber | 11 | | 11 |
| **TOTALS** | **31,896** | **26,253** | **4,529** |

*Totals include other international assets

# Leaseback innovation put to work

## Deal limits key pacts

By Brad Rudin

Long-term financing for a paper factory jointly sponsored by Minnesota Power, Duluth, and Pentair Inc., St. Paul, Minn., was completed early this month using an innovative sale and leaseback.

The $380 million leveraged lease was arranged by First Boston Corp., New York. Richard A. Sun, a vice president in First Boston's private finance unit, said investors' sole recourse once the project is complete (probably by the end of the year) is through cash deficiency and keepwell agreements that are limited to about 50% of the project's cost. These agreements provide financial support for the investors if cash flow from the enterprise is insufficient to service the debt.

**Investors in Lake Superior "saw that the project had a high probability of being very successful."**
**—Richard Sun First Boston**

In addition, there are no long-term sales contracts for Lake Superior Paper Industries, Duluth, the joint venture sponsored by Minnesota Power and Pentair. Long-term contracts, favored by investors because they guarantee cash flow from the enterprise, are typically a feature of co-generation projects.

"This is the first project we think that was done with a limited (cash deficiency agreement) and no long-term formula price guaranteed contract," Mr. Sun said.

Equity for the project, which started limited operations late last year, was provided by subsidiaries of Public Service Electric & Gas Co., Newark, N.J.; NYNEX Corp., New York; Southern California Edison Co., Rosemead; Dana Corp., Toledo, Ohio; and Southern Indiana Gas and Electric Co., Evansville.

Debt investors are Prudential Insurance Co. of America, Newark, N.J.; Northwestern Mutual Life Insurance Co., Milwaukee; John Hancock Mutual Life Insurance Co., Boston; and the Wisconsin State Board of Investment, Madison.

Lake Superior obtained favorable financing terms on the 25-year lease because "investors saw that the project had a high probability of being very successful," Mr. Sun said. The Lake Superior Paper Industries plant produces supercalendered paper, a semi-glossy paper used in catalogs, newspaper supplements, magazine inserts and other commercial printing products.

**Lake Superior Paper Industries, Duluth, a joint venture sponsored by Minnesota Power and Pentair Inc., is being financed using an innovative sale and leaseback arranged by First Boston Corp. that features a limited cash deficiency agreement and no long-term formula price guaranteed contract.**

Proceeds from the sale of the plant will pay off bank debt and other costs related to the joint venture, according to an 8-K report filed by Pentair. The project, first announced in late 1985, initially was financed with a $360 million revolving credit-term loan agreement with 14 banks.

Pentair, which owns a 50% interest in Lake Superior Paper, produces paper, power tools, machinery, industrial lubrication, pumps and other products. Minnesota Power operates an electrical power generation system as well as units that provide telephone service, natural gas and water and wastewater treatment.

Equity investors provided 29% and lenders, 71%, of the project's long-term capital, Mr. Sun said.

In a sale and leaseback, equity investors buy equipment from the project sponsor and lease it back. The incentive typically comes from tax advantages for equity investors, which are passed along to the equipment user in the form of lower rental rates.

Five-year depreciation and the investment tax credit are available to Lake Superior under transition rules that apply to the Tax Reform Act of 1986, Mr. Sun said.

Tax considerations did not play a primary role in the deal, though. Instead, Mr. Sun said, the sponsors needed long-term fixed-rate financing, flexible lease renewal and purchase provisions.

The option to purchase is available at certain points during the lease term and at the end of the 25-year agreement, while renewal options are also available at the end of the lease term. ■

# LBO power

*Continued from page 3*

ment to leveraged buy-outs the $10.6 billion Washington State Investment Board, Olympia, Wash., made to KKR in 1987. Washington is the largest pension investor in buy-outs; its total commitment is about $1 billion.

David Weig, deputy director, said none of the $430 million has been invested yet; that will take several years to complete.

Tom Judge, division manager-investment management operations for the $37.5 billion American Telephone & Telegraph Co. pension fund, New York, said AT&T had $200 million in buy-outs in 1987, compared with $82 million a year earlier, an increase of 145%.

Among the funds that reported decreases in the book value of their leveraged buy-out investments as of Sept. 30:

- The $8.8 billion Oregon Public Employes Retirement System, Salem, down 34.5%, to $262 million from $400 million;
- Wisconsin State Board of Investment Board, Madison, Wis., down 28% to $144 million from $200 million;
- GTE Corp., Stamford, Conn., down 30% to $126 million from $180 million;
- The $2.2 billion Massachusetts Pension Reserves Investment Trust Fund, down 28%, to $36 million from $50 million;
- The $66.17 billion Teachers' Insurance and Annuity Association, New York, down 25% to $600 million from $800 million.

John Carroll, president of GTE Investment Corp., the pension investment unit of the GTE fund, said levels dropped because "several of our earlier funds paid out substantial assets" during 1987 and the payouts outweighed any new investments.

Soaring stock prices and increasing competition from new buy-out investors that boosted bidding prices out of range caused some funds to be net liquidators. Market conditions also were ripe to take leveraged buy-out companies public or to sell them to other private investors, causing those earlier investments to be liquidated.

Pension executives at Oregon, Wisconsin and GTE attributed lower leveraged buy-out levels to liquidation, not lack of interest.

In fact, Oregon and Wisconsin raised their commitments considerably during 1987.

James C. George, investment manager at Oregon, said commitments to the KKR fund rose $600 million during 1987; $100 million in funds were rolled over from 1986 and reinvested.

Marshall Burkes, executive director of the Wisconsin fund, said commitments rose "considerably" in 1987 to $540 million; he declined to say by how much.

Others reporting lower investments in leveraged buy-outs were: the $3.1 billion Delta Air Lines Inc. fund, Atlanta, to $50 million from $65 million; the $2.9 billion Textron Inc. fund, Providence, R.I., to $50 million from $70 million; the $3.8 billion Iowa Public Employees Retirement System, Des Moines, to $49 million from $75 million; the $6.8 billion Allied-Signal Inc. fund, Morristown, N.J., to $30 million from $45 million; and the $3 billion Illinois State Board of Investment, Chicago, to $15 million from $40 million.

Those that did not commit to buy-outs in 1987 are sharing the optimism of those that did; several pension funds executives said they might reinvest profits from leveraged buy-out investments when deals materialize.

That list includes TIAA, where J. Daniel Lee, vice president of investments, said the stock market correction is one reason to finance new buy-outs. During the past two years, he said, the fund — a direct investor in buy-outs — was reluctant to make bids.

The $27.3 billion General Electric Co. pension fund is also a direct investor and, like TIAA, saw 1987 as a good year to reap the rewards of previous investments or to refinance its positions while interest rates were low, said Robert Morris, senior vice president, General Electric Investment Corp., Stamford, Conn..

Mr. Morris said the fund is ready to invest in new opportunities and already has bid on a new deal in January. ■

**Funds investing in LBOs among the Top 200**
**($ millions)**

| Fund | Assets |
|---|---|
| Washington State Investment Board | 990 |
| General Electric | 600 |
| TIAA-CREF | 600 |
| Oregon Public Employes | 262 |
| New York State & Local Retirement Systems | 218 |
| AT&T | 206 |
| Wisconsin Investment Board | 144 |
| GTE | 126 |
| Michigan State | 110 |
| United Technologies | 79 |
| Delta Air Lines | 50 |
| Textron | 50 |
| Iowa Public Employees Retirement System | 49 |
| Minnesota Mining & Manufacturing | 41 |
| World Bank | 40 |
| Pension Reserves Investment Management Board | 36 |
| Allied-Signal | 30 |
| Illinois State Board of Investment | 15 |
| Grumman | 10 |
| Honeywell | 10 |
| ITT | 10 |
| Eli Lilly | 2 |
| **Total** | **3,678** |

# Name, owners change

RICHMOND, Va. — Continental Investment Advisors Ltd. has changed its name to Richmond Capital Management.

The name change reflects the sale of the firm to its principals.

It had been part of Tae Continental Group of insurance and financial services companies owned by Combined International Corp., Chicago.

Continental Investment Advisors' principals agreed late in 1986 to buy the firm (*Pensions & Investment Age*, Oct. 27, 1986) and completed the purchase April 1. The name change was effective Jan. 1.

"While we were with The Continental Group, we were a wholly owned subsidiary and our name and affiliation were synonymous," said Charles E. Keller, president.

"However, since we are no longer a part of Continental, we feel our own identity should be established in the marketplace," Mr. Keller added.

Richmond Capital Management, a fixed-income specialist, manages $900 million, of which $540 million is tax exempt, for 30 clients in 14 states.

Clients include corporate and public pension funds, foundations, endowments and corporate cash accounts. ■

2/8/88 S2710-2

# Reform wrangling leaves sour aftertaste

By Nicky Robertshaw

WASHINGTON — More than a month after the Pension Protection Act of 1987 became law, bad blood still remains among key players on Capitol Hill and in the Reagan administration.

"If David Walker wants anything from us, we'll suggest that he go and see the tax committees," said a key congressional labor committee aide last week, referring to the assistant secretary of labor.

Such sniping, although bitter, could simply be the latest round of fighting among groups that, eventually, will have to do business with each other. More troublesome, however, is the possibility that the sniping will affect the way in which pension-related issues are handled this legislative session.

**News analysis**

The problem stems from long-standing jurisdictional tugs-of-war over the pension legislation between the tax committees — the House Ways and Means Committee and Senate Finance Committee — and the labor committees — the House Education and Labor Committee and the

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PENSIONS & February 8, 1988

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# Equity market exodus

## $10 billion cut could be legacy of crash

By Joel Chernoff

NEW YORK — The nation's 1,000 largest pension funds might have reduced their long-term commitment to the stock market by as much as $10 billion in the wake of the Oct. 19 crash, a *Pensions & Investment Age* survey shows.

Other funds are considering reducing their equity commitments, according to the survey, suggesting even more assets might be taken from the market.

And Robert Arnott, vice president and strategist at Salomon Brothers Inc., New York, projects pension funds will pull more than $120 billion out of active equity portfolios during the next two years.

Largely based on discussions with pension executives, Mr. Arnott said pension funds will withdraw $60 billion in 1988 and $60 billion in 1989, and these figures could be much higher. At minimum, this translates into a shift of more than 20% of private and public funds' roughly $560 billion in actively managed equity assets.

Mr. Arnott, however, said the effect on the stock market is hard to determine because pension flow is only one of many factors. Renewed buying by individuals and foreign investors, and continued corporate purchases of their own stock could more than offset the pension withdrawals, he said.

The projected shift could have devastating effects on active equity managers, whose median returns have underperformed the Standard & Poor's 500 stock index since the beginning of 1983.

Indexation of stocks has soared to 25% of pension equity allocations from 9% in late 1982. Meanwhile, fee pressure on active managers is getting increasingly intense (*P&I Age*, Jan. 25).

Several pension experts said the $60 billion-per-year figure is too high, but most agreed trends will be against active management and there will be a move into fixed income and other asset classes.

*P&I Age*'s survey, which went to 600 of the nation's 1,000 largest pension funds, found 7.5% of the 173 respondents had made significant shifts in their long-term asset mixes in the wake of the crash.

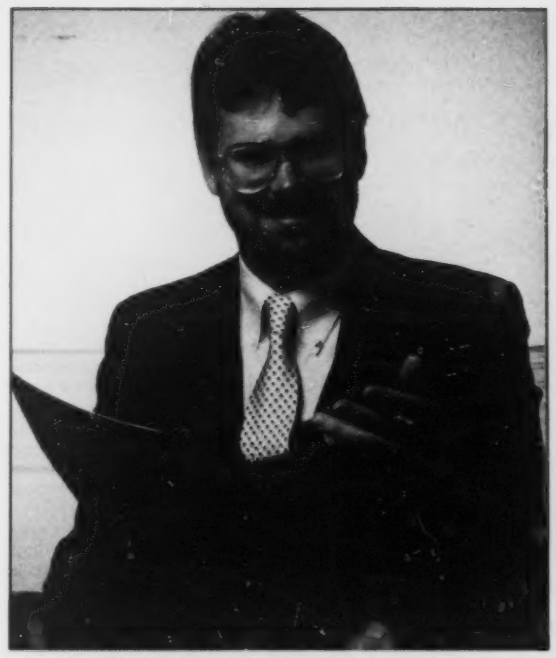
On average, these funds had reduced their long-term equity commitments by eight percentage points, which, if applied to the entire 1,000 largest funds universe, would take $10.4 billion out of the equity market permanently.

In addition, another 10% of the respondents were considering changing their long-term asset allocations to reduce their equity exposure.

The impact of such reductions could fall hardest on active equity managers. "Active managers just can't be cavalier anymore," said David L. Eager, managing partner of D.L. Eager Associates, Louisville, Ky.

Mr. Arnott said the shift out of active equity management reflects four trends. He expects the first

*Continued on page 33*



**Robert Arnott of Salomon Brothers Inc. says pension funds could pull as much as $120 billion out of active equity portfolios in the next two years.**

Photo by Douglas Konkol

**The Pension Benefit Guaranty Corp. and LTV are back in court as the agency seeks a summary judgment forcing the company to take back three terminated plans.**

# Agency renews court battle over LTV termination

By Fred Williams

NEW YORK — In a sharply worded 110-page motion, the Pension Benefit Guaranty Corp. petitioned U.S. District Court for a summary judgment ordering The LTV Corp. to restore the company's terminated steel-division pension plans.

Dallas-based LTV has not recognized a September order by the PBGC restoring the three defined benefit plans to the company. The plans were involuntarily terminated by the PBGC in January 1987 because they were severely underfunded.

The motion, filed Jan. 29 in U.S. District Court for the Southern District of New York, said LTV should be required to resume responsibility for the plans as of their pretermination status Jan. 13, 1987.

The PBGC said restoration is appropriate because: LTV's financial condition has improved substantially since the plans were terminated; it has abused the pension plan insurance program by establishing plans that essentially continued the terminated plans, and; it has demonstrated a willingness to fund retirement programs at levels comparable to those before termination.

The motion cites a financial analysis

*Continued on page 34*

**INSIDE**

**Saying no to trading restrictions — P. 13**

trictions on stock market trading
ttered the strongest opposition to
ommission.

## LATE NEWS

### Mineworkers' pact offers 401(k)

WASHINGTON — Members of the United Mine Workers of America will be able to participate in what is believed to be the first nationwide multiemployer 401(k) plan under their new contract.

The UMWA and the Bituminous Coal Operators Association reached tentative agreement on the pact Jan. 30. Union members were scheduled to vote on it Feb. 8; ratification is expected.

Under the plan, to be set up within 90 days of ratification, UMWA members will be able to contribute up to 10% of their pretax wages. They will be able to choose among four investment options. Fund trustees are to select two of the options from a list prepared by the union and two from a list submitted by the employers' association.

Between 65,000 and 70,000 UMWA members will be eligible to participate in the 401(k).

### University wins divestiture appeal

LANSING, Mich. — The Michigan Court of Appeals has ruled unconstitutional a 1982 state law forcing public colleges and universities to divest themselves of South Africa-related stocks.

The appeals court overturned a 1985 ruling by the Ingham County Circuit Court, Lansing, that upheld the law in a suit brought by the University of Michigan, Ann Arbor.

Norman Herbert, investment officer at the university, said the ruling "upholds the regents' control of financial affairs." The circuit court had ruled university regents' autonomy covered only educational, not financial, matters.

Mr. Herbert noted the university's endowment fund, now at $250 million, has divested all but $140,000 worth of stocks in companies doing business in South Africa; it held $52 million in such stocks in 1982. University officials' objection was not to divestiture as such, but to the state's intrusion into the regents' authority.

The law applied only to public colleges and universities; Michigan has no divestiture law for state pension funds.

### NYNEX fund gets new chief

NEW YORK — Richard Wolf, who managed subsidiary cash operations at NYNEX Corp., has been appointed investment director for the company's $14.3 billion pension fund, replacing Robert A. Wysocki, who has become NYNEX's director of investor relations.

Also at NYNEX, William Coughlin, who was an investment director managing the in-house assets for NYNEX, has joined Dreman Value Management, New York, as vice president-money management, his office confirmed. Mr. Coughlin was out of town and could not be reached for comment.

### 404(c) hearings to get under way

WASHINGTON — The Department of Labor begins two days of hearings this week on its proposed regulation spelling out what sponsors of participant-directed individual accounts must do to avoid fiduciary liability for the accounts.

The proposal, affecting Section 404(c) of the Employee Retirement Income Security Act, has drawn at least 226 comment letters from a broad range of corporate sponsors, trade groups, investment companies, insurance companies and other interested parties since it was issued in September (*Pensions & Investment Age*, Sept. 21). Representatives of at least 25 groups will testify at the hearings.

The comment letters raise concerns that the "broad range" of investment choices and other requirements in the proposal would be costly and troublesome to implement, and that guaranteed interest contracts should be allowed as the "safe" investment option required under the regulation.

### 1988 benefit levels established

WASHINGTON — The maximum annual benefit that can be be funded through a qualified defined benefit plan will be

*Continued on page 34*

## DEPARTMENTS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Vol. 16, No. 3 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1988.

## Manager questionnaires now out

Questionnaires for *Pensions & Investment Age*'s annual issue profiling the nation's institutional money managers are in the mail. For your firm to be profiled in the May 23 directory, please return the questionnaire by Feb. 26 to Christine Philip, directory coordinator, *Pensions & Investment Age*, 740 N. Rush St., Chicago, Ill. 60611-2590.

If you have any questions, or have not received a questionnaire by Feb. 15, please contact Ms. Philip at (312) 649-5217.

# Researchers tip managers to winners

By Jacqueline Dutton and Fred Williams

Outside research resulted in some of the best stock tips and strategic moves of 1987, money managers said.

Here's a sampling of some of the best advice outside research firms provided last year.

Richard Morrison, a principal of Jurika & Voyles, Oakland, Calif., credits two Stifel Nicolaus & Co. Inc. researchers for some invaluable strategic advice last summer.

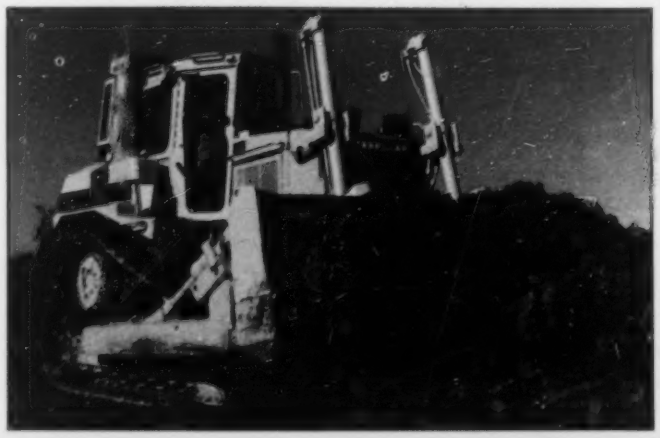
Mr. Morrison said Duane Arnold and W. Clay Allen "really alerted us to the fact that we would have a major drop in the market in October — not to the extent we had — but to some degree," Mr. Morrison said. "So we cut back fairly substantially in equities and that kept us from getting completely clobbered."

He said the firm's balanced accounts were 85% in stocks before the warning, and were cut to 60% stocks heading into the October stock market crash, with plans to go down to 50%.

Mr. Morrison also said some credit should go to Goldman, Sachs & Co. drug industry analysts Frederic Greenberg and David Musket, who were instrumental in giving Jurika & Voyles advice on some of its best performers during 1987: **Syntex Corp.**, which was bought at 27 in

*Continued on page 30*

**Caterpillar Inc. was a big stock hit for Investors Asset Management in 1987, and Richard C. Erwin of the firm credits Merrill Lynch analyst Alexander Blanton with turning him on to the winner.**



# New 'news wars' entry

BOSTON — Richard Chimberg is trying to bite the hand that used to feed him.

Mr. Chimberg has launched a weekly newsletter, Investment Management Weekly, to compete with Institutional Investor Inc.'s biweekly Money Management Letter. Both provide tips on investment managers hired by pension funds as well as which funds are screening managers.

Mr. Chimberg worked for Money Management Letter for about 1½ years. He left in August 1985 to work in public relations for two consulting firms and, later, to do free-lance writing.

By offering his newsletter at twice the frequency for lower cost ($595 annually vs. $1,275 for Money Management Letter) he is taking direct aim at his former employer.

"I've long thought there was a need for a weekly publication to cover this business," Mr. Chimberg said.

While acknowledging the competition with Money Management Letter, he doesn't anticipate the advent of "newsletter wars."

Tom Lamont, editor of the newsletter division at Institutional Investor, New York, said he isn't worried. "I'm not concerned we're going to suffer any erosion" of subscribers, he said, adding there were no immediate plans to change the publication's frequency.

# Business decisions hurt Salomon rating

By Brad Rudin

NEW YORK — Salomon Inc., which recently received lower credit ratings from the two major agencies, is at a junction at which management decisions could affect the firm's creditworthiness for years.

Salomon's problems mirror, to varying degrees, pressures felt by other Wall Street firms.

The giant securities firm has tried to pare costs by dismissing 800 employees, abandoning plans for a huge office tower in midtown Manhattan and scrapping unprofitable units.

Although these measures should bolster credit quality, the firm's move into merchant banking pushes its risk profile in the opposite direction.

Moody's Investors Service, New York, last month downgraded Salomon's senior long-term debt to A 1 from Aa 3. "Various alterations in the firm's capital structure, as well as recent adverse operating results, have diminished risk-adjusted capital and debtholder protection," the rating agency said.

In December, Standard & Poor's Corp., New York, reduced the firm's senior debt rating to A+ from AA−. "The downgrade reflects weaker operating performance due to the cost of the firm's aggressive business and overseas expansion, volatile trading results and increasing competition for its principal institutional businesses," Standard & Poor's said.

Salomon declined comment on the rating changes.

Photo by Arnie Adler

**Salomon, based at 1 New York Plaza, is facing increased pressure on its credit quality.**

The recent downgrades will have little immediate impact on Salomon, said Michael W. Blumstein, the brokerage industry analyst at First Boston Corp. "I don't get the impression they are about to sell huge quantities of long-term debt," he said, adding the firm's commercial paper rating has remained unchanged.

John Jerome Kriz III, a senior analyst at Moody's, attached more importance to the rating change. "Securities firms are very sensitive to their credit standing," he said. "A strong Moody's credit standing can support a securities firm's profitability as well as its ability to (pursue) certain types of business." Interest expense, which is a function of credit rating, is typically an investment bank's biggest cost.

Salomon's role as an intermediary in the swap market is a business that could be affected by its rating, Mr. Kriz said.

Although neither Moody's nor Standard & Poor's changed Salomon's commercial paper rating, the cost of short-term capital could be raised because of the changes in the long-term debt rating, Mr. Kriz said, noting variations in spreads exist within

*Continued on page 30*

# Financing volume climbs

## 'Esoteric' instruments perk up deals

By Brad Rudin

Stock and debt financing volume moved up sharply in January as the financial markets pushed ahead with their post-Oct. 19 recovery on the strength of good economic news.

Investment bankers spiced up the expanded volume of deals with some new, modified or revived esoteric instruments.

Stability in the stock market led to common equity volume of $970.1 million in January, 34.6% higher than the $720.8 million recorded in December, according to data provided by IDD Information Services Inc., New York.

Among the largest common stock deals issued, and their underwriters, were:

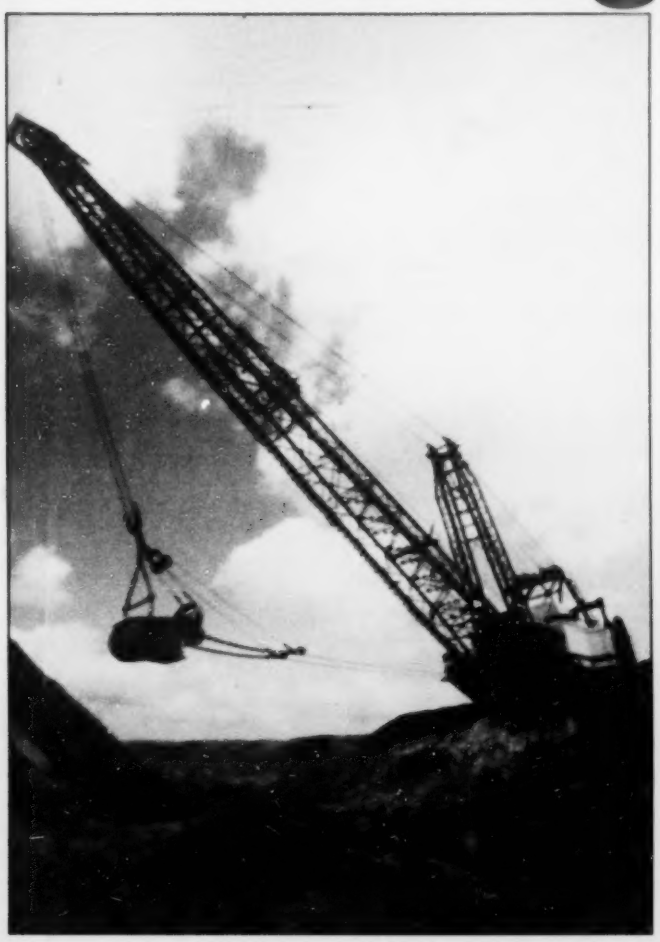
- IMC Fertilizer Group — $220 million — Merrill Lynch Capital Markets.
- Charter One Financial — $34.4 million — Merrill Lynch.
- Allwaste Inc. — $20.6 million — Alex. Brown & Sons Inc.
- Ivax Corp. — $13.1 million — Dean Witter Capital Markets.

Issuers did the bulk of their debt financing in the second half of January, after good news about the November trade figures sparked a rally in the bond market. Large non-mortgage-related debt issues sold in January include:

- BVPS Funding Corp. — $646 million collateralized lease bonds 9.9% and 11% due 1999 and 2017 — First Boston Corp.
- Columbia Pictures Entertainment Inc. — $575 million senior subordinated debentures and notes 10⅝% and 9⅞% due 1998 and 2018 — Allen & Co.
- Mobil Oil Canada Ltd. — $500 million 8⅜% notes due 1993 — Merrill Lynch.

Corporate borrowers paid an average yield to maturity of 9.4%

*Continued on page 32*



IMC Fertilizer Group was one of the corporations whose common stock issues helped boost financing volume last month. Its $220 million issue was underwritten by Merrill Lynch Capital Markets.

**January was a rousing month for investment bankers and the investors they seek to pump money into client coffers. Among the issues was a high-yield debt offering for $125 million in 10-year notes for Manor Care Inc., below, underwritten by Drexel Burnham Lambert Inc., and the $13.1 million common stock offering for Ivax Corp., right, underwritten by Dean Witter Capital Markets.**

# N.Y. sets unusual property strategy

By John Covaleski

ALBANY, N.Y. — The $35 billion New York State & Local Retirement Systems is allocating up to $1.4 billion to implement an unusual direct investment strategy of hiring only one manager per property type.

The fund is signing a contract with Richard Ellis Inc., New York, to invest in office and retail properties, and is in negotiations with TCW Realty Advisors, Los Angeles, to invest in industrial properties. Although no amounts were given, Ellis could get most of the money because the fund's portfolio is to be invested 50% in office, 25% in retail and 25% in industrial.

Pension funds hire managers that specialize in one property type, but they usually hire more than one manager in each category.

"We believe it is the best approach," said Robert J. Steves, the fund's assistant deputy comptroller for real estate investments.

"We'll hire managers based on their property-type expertise and keep them focused to avoid an overlap and inefficiencies. We want to invest in real estate; we don't want to be traffic cops."

Mr. Steves said it's possible the state fund eventually will hire more than one manager for each property type. "We may decide we want further diversification," he said. "We're not wedded to the idea."

Jake Young, senior manager of Roulac Real Estate Consulting Group, San Fran-

*Continued on page 34*

**Top 20 public pension funds using private placements**

| Fund | $ millions |
|---|---|
| California Public Employees' | 44,036 |
| New York State & Local | 38,747 |
| New York City Retirement | 33,633 |
| California State Teachers | 23,714 |
| New York State Teachers | 23,035 |
| New Jersey Division/Investment | 19,785 |
| Texas Teachers | 18,930 |
| Michigan State Employees | 16,680 |
| Wisconsin Investment Board | 15,632 |
| Ohio Public Employees | 14,985 |
| Ohio State Teachers | 14,821 |
| Florida State Board | 13,700 |
| North Carolina Retirement | 12,446 |
| Pennsylvania Public School | 12,021 |
| Washington State Board | 10,600 |
| Minnesota State Board | 9,706 |
| Oregon Public Employes | 8,789 |
| Maryland State Retirement | 8,274 |
| Los Angeles County Employees | 8,262 |
| Pennsylvania State Employes' | 7,965 |
| TOTAL | 355,761 |

**Corporate pension funds using private placements**

| Fund | $ millions |
|---|---|
| AT&T | 716 |
| USX | 300 |
| Honeywell | 213 |
| Minnesota Mining & Manufacturing | 200 |
| Goodyear Tire & Rubber | 152 |
| Textron | 75 |
| Atlantic Richfield | 49 |
| Travelers Insurance | 35 |
| Southern New England Telephone | 28 |
| E.I. du Pont de Nemours | 13 |
| Armco | 10 |
| Union Carbide | 10 |
| Xerox | 10 |
| CIGNA | 9 |
| Commonwealth Edison | 7 |
| Chrysler | 2 |
| TOTAL | 1,829 |

# More issuers turn to private market

By Marcia Parker

The private placement market, once a "sleepy adjunct" to the public market and dominated by lower credit-quality issuers and highly complex debt deals packed with pages of ironclad covenants, is coming of age.

Some investment bankers are predicting issuers' cost of capital will come down as a result.

Now more issuers of varying sizes and credit quality are tapping the market, which has grown to more than $1.2 trillion in 1986 from $24 billion six years ago.

Some are entering for the first time, spurred by the closed window for equity offerings following Black Monday. Others are turning to the private market because they are discovering it offers more than traditional straight debt financing and that some of the onerous traits associated with private placements, such as extremely tough covenants, are gone.

A host of new products — including straight equity deals — are being fashioned by private market professionals to compete head on with what's available in the public market. And covenants are being loosened to mirror the public market.

The efforts are paying off in part because, historically, buyers of private market products — insurance companies and, increasingly, corporate and public pension funds — have increased their risk tolerance in the hope of boosting returns. That, in turn, has spurred them to seek investment vehicles that can generate those hefty returns — many of which are offered in the private market. And relatively new players, such as cash-rich Japanese institutions, are hungry for those same high-yielding investments.

"In the '60s right through the '70s and the early '80s, the private placement market was a sleepy adjunct to the public market," Jerome Greene, managing director, Merrill Lynch Capital Markets, told a conference on private placements in January that attracted more than 250 participants.

"We've witnessed the most profound change in the private placement market in the past five or six years. We've seen a whole new role for the private market professional. We've seen the development of an array of private placement products that make it almost essential for any issuer to take a look at the private placement market before attempting any financing," Mr. Greene said.

He said companies looking for money have a lot more sources of capital and structures for that capital than ever before.

"It means that a lot more institutions are competing for (an issuer's) business and that its cost of capital will be lowered as a result. It also means that the financial staff of the company has got to explore as many of these alternatives as possible to get the best deal," Mr. Greene said.

Avon Corp., New York, hasn't done any private placements, but is considering "an international private placement transaction," said John Donaldson, vice president and treasurer. Avon would tap the market "for corporate financing, not as a pension fund investment."

"We've always looked at it as an alternative financing source, but in the past we've found it was not competitive with the public market," Mr. Donaldson said, adding the enhanced access of many public companies to the public credit market has

*Continued on page 34*

## Net dollar gain

### Top 10 managers over $1 billion

| Firm | $ millions |
|---|---|
| Bankers Trust | 13,300 |
| Travelers Cos. | 5,226 |
| Boston Co. | 5,157 |
| JMB Institutional Realty | 4,424 |
| Mellon Capital Mgmt. | 4,200 |
| State Street Bank and Trust | 3,900 |
| Prudential Asset Mgmt. | 3,800 |
| Copley Real Estate Advisors | 3,300 |
| Pacific Investment Mgmt. | 2,622 |
| Manufacturers Nat'l Bank of Detroit | 2,205 |

### Top 10 managers $250 mil. to $1 bil.

| Firm | $ millions |
|---|---|
| Capstone Asset Mgmt. | 615 |
| Columbus Circle Investors | 394 |
| Allstate Life Insurance | 360 |
| Daniel Breen | 326 |
| Oechsle Int'l Advisors | 299 |
| Julius Baer Investment Mgmt. | 269 |
| Posthorn Global Asset Mgmt. | 260 |
| Beutel, Goodman Int'l | 255 |
| Confederation Life Insurance | 251 |
| Hahn Holland & Grossman | 250 |

### Top 10 managers under $250 million

| Firm | $ millions |
|---|---|
| Consistent Asset Mgmt. | 154 |
| Boston International Advisors | 144 |
| Trinity Advisors | 113 |
| Ariel Capital Mgmt. | 101 |
| Cambiar Investors | 86 |
| SBC Portfolio Mgmt. Int'l | 85 |
| Palley-Needelman Asset Mgmt. | 84 |
| Marathon Asset Mgmt. | 75 |
| Penreal Advisors | 71 |
| Cadinha | 69 |

# Basics still hold appeal

Indexers and quantitative managers scored well in attracting domestic equity business during 1987, but there was room for fundamental approaches as well.

Among managers with more than $1 billion in total assets, the top four gainers and six of the top 10 have most or all of their equity assets in index funds. Among those with between $250 million and $1 billion in total assets, the second-highest gainer is an indexer. Managers were asked to report business gained between Jan. 1 and Dec. 1 of 1987.

For the fourth consecutive year, Wells Fargo Investment Advisors, San Francisco, reported the most new equity business among large managers. It gained nearly $7.2 billion, all indexed.

Bankers Trust Co. — Investment Management Group, New York, was second with $4.8 billion, of which $2.5 billion was indexed; Alliance Capital Management Corp., New York, was third with $1.9 billion, of which $1.3 billion was indexed; and Mellon Capital Management Corp., New York, was fourth with $1.8 billion, all indexed.

Others with large portions of indexed assets among their new domestic equity business were State Street Bank and Trust Co., Boston, with $725 million indexed among its $860 million in new equity business, and American National Bank and Trust Co. of Chicago, with $600 million indexed among its $700 million in new business. Two others, Prudential Asset Management Group, Newark, N.J., and The Boston Co. Inc., Boston, had smaller portions indexed.

Indexing has grown partly because the majority of active equity managers have underperformed major market indexes. But, pension fund executives still hold a place for active managers with strong

*Continued on page 31*

# Indexing top draw

## Interest in real estate, GICs rides high

By Trudy Ring

Passive management was the major theme of tax-exempt fund investing during 1987.

About half the money placed by pension funds and other tax-exempt institutions in equity accounts and a third of the dollars in fixed-income accounts went to index funds during 1987, continuing the trend toward passive core management.

Real estate, guaranteed investment contracts and international/global investing continued to grow in favor with pension funds, while portfolio insurance business was down significantly from 1986.

A total of 266 money managers responded to *Pensions & Investment Age*'s Scorecard survey. They reported net growth of $107.5 billion in tax-exempt assets under management in the 11 months ended Dec. 1. This figure takes into account contributions from new and existing clients, client withdrawals and return on investment.

A year ago, 259 managers reported a net gain of $179.7 billion in assets under management during 1986.

For 1987, participating managers reported $74.2 billion in contributions from new clients; $55.8 billion in additional contributions from existing clients; and $2 billion in market appreciation, dividends and interest. The sum of these is greater than the $107.5 billion because of client withdrawals.

Also, the net growth for several managers was less than the sum of their new business in various asset classes because of client withdrawals and also because of market factors, particularly the October stock market plunge.

For instance, Wells Fargo Investment Advisors, San Francisco, was the top gainer of equity business for the fourth consecutive year and was second in new fixed-income business, but because of market losses showed a net decrease of $5.4 billion in assets under management.

Still, Wells Fargo's showing in attracting business indicates the continuing popularity of index funds. The firm only offers passive management capabilities.

The managers surveyed reported $17.5 billion of their new business was for stock index funds, but they were not asked to break this out between domestic and international. Most of this was domestic, as international stock index funds, while growing, are a relatively new strategy.

A leader in this area is State Street Bank and Trust Co., Boston, which won $1.3 billion in new international equity business, largely indexed.

The total new domestic equity business, including indexing, for all respondents was $34.5 billion; international equity accounted for $5.5 billion.

Total new domestic bond business was $31.8 billion; of that $10.6 billion was indexed. There was $1.5 billion in new international bond business. International bond index funds are being marketed, but have yet to attract substantial assets.

"There's no deep secret as to why (indexing has boomed) — the inability of active managers to match the indexes," said Peter Braun, vice president and director of marketing at State Street Bank.

In last year's survey, Scorecard

*Continued on page 31*

## Most new equity business (net)

### Top 10 managers over $1 billion

| Firm | $ millions |
|---|---|
| Wells Fargo Investment Advisors | 7,175 |
| Bankers Trust | 4,834 |
| Alliance Capital* | 1,948 |
| Mellon Capital Mgmt. | 1,800 |
| Prudential Asset Mgmt. | 1,240 |
| Sun Banks Investment Mgmt. | 1,083 |
| Rosenberg Institutional Equity Mgmt. | 1,063 |
| Boston Co. | 991 |
| State Street Bank and Trust | 860 |
| American Nat'l Bank, Chicago | 700 |

* as of Dec. 31

### Top 10 managers $250 mil. to $1 bil.

| Firm | $ millions |
|---|---|
| Columbus Circle Investors | 328 |
| Capstone Asset Mgmt. | 324 |
| Hahn Holland & Grossman | 193 |
| John McStay Investment Counsel | 174 |
| Westwood Mgmt. | 155 |
| Renaissance Investment Mgmt. | 141 |
| Eagle Asset Mgmt. | 138 |
| Disciplined Investment Advisors | 133 |
| Tom Johnson Investment Mgmt. | 132 |
| Investment Advisors | 121 |

### Top 10 managers under $250 million

| Firm | $ millions |
|---|---|
| Ariel Capital Mgmt. | 118 |
| Cambiar Investors | 111 |
| Scudder, Stevens & Clark | 97 |
| Marathon Asset Mgmt. | 75 |
| WEDGE Capital Mgmt. | 69 |
| Aronson & Fogler | 50 |
| Derivative Markets Mgmt. | 50 |
| Astrop Advisory | 43 |
| Dietche & Field Advisers | 32 |
| Cramer Rosenthal McGlynn | 30 |

# Assets allocated to bonds up 31%

By Trudy Ring

Much of the bond business that flowed to large money managers in 1987 went into index funds, while that allocated to midsize and small firms went to strategies with a particularly good track record or a special market niche.

Among managers participating in *Pensions & Investment Age*'s Scorecard survey, the amount placed in bonds was up 31% from that reported in 1986, to $31.8 billion from $24.3 billion. Managers differed as to whether bond management will continue to grow in the wake of October's stock market crash.

Among managers with more than $1 billion in total tax-exempt assets under management, those heavily in index funds took four of the top 10 spots for new bond business. Two others had smaller portions of their bond assets indexed.

Those with a majority of their new bond business indexed were Wells Fargo Investment Advisors, San Francisco, in the second spot with nearly $3.3 billion, all indexed; Putnam Cos. Inc., Boston, third with about $2.4 billion, of which $1.6 billion was indexed; State Street Bank and Trust Co., Boston, fifth with $1.4 billion, of which $1.2 billion was indexed; and Lincoln Capital Management Co., Chicago, with $893 million, all indexed.

In terms of assets attracted, bond indexing seems to be where stock indexing was a few years ago, said Peter Braun, vice president and director of marketing at State Street. It has become apparent to pension executives that a majority of active bond managers, like a majority of active stock managers, have been unable to outperform major market indexes, he said.

Still, while pension sponsors use index funds as a core investment, it would be unusual to see any pension fund 100% indexed, he added.

The top firm, Bankers Trust Co. — Investment Management Group, New York, is a force in indexing but attracted assets for other fixed-income strategies as well. Of its nearly $3.5 billion in new bond business,

*Continued on page 31*

PORTFOLIO MANAGEMENT

# Restrictions 'poor medicine'

## Pension execs greatly favor free market

By Barry B. Burr

Pension fund officials registered the strongest opposition among groups surveyed by the Brady Commission to suggested restrictions on trading following the Oct. 19 market crash.

They were most opposed to proposals to ban program trading, forbid or limit portfolio insurance; prohibit or constrain the use of financial derivative instruments; and place price limits on futures.

On other issues, pension officials more than others surveyed believe psychological, rather than technical or fundamental, factors were the overwhelming cause of the Oct. 19 crash, the survey showed.

In the survey, most pension funds reported the value of their equity portfolios fared better than the market on Oct. 19.

The Brady Commission, formally known as the Presidential Task Force on Market Mechanisms, surveyed 15 groups of market participants and experts, including corporate and public pension funds, securities exchanges, mutual funds, investment banks and Nobel prize winners in economics. The survey asked their attitudes on suggested trading restrictions and their opinions on why the market crashed. The task force released its 371-page report in January.

The task force sent surveys to two groups of pension funds — the 50 largest U.S. corporate pension funds (of which 25 responded) and 149 private and public pension funds on portfolio insurance (of which 80 responded).

Pension funds using portfolio insurance had a larger percentage of their assets in equities than those not using the strategy designed to limit downside risk, according to the second survey.

The 80 respondents in that survey had an average of 46% of their assets in equities as of Sept. 30. Of those, 11 were using portfolio insurance and had an average equity allocation of 56%.

The first survey showed corporate pension executives were strongly opposed to further regulation of the securities markets.

On program trading, 68% opposed any limit or ban, and 13% supported such action.

The most support and least opposition for restrictions on program trading came from banks and securities firms, recorded as one group. Some 29% were for restrictions, while 10% opposed. On average, 18% of all respondents favored such restrictions, while 25% were opposed.

Pension fund executives among the 50 largest corporate sponsors recorded the least support and strongest opposition to restricting portfolio insurance. Twenty-one percent were against any restrictions, while only 9% were for some.

Banks and securities firms again registered the strongest support for such restrictions, with 18% in favor and 5% against.

On average, 11% of all respondents are for such restriction, while the same percent are against such restriction.

Sixty-three percent of pension funds among the 50 largest corporate sponsors were against restrictions on financial instrument derivatives, while 13% were in favor. On average, 16% of all respondents favor restrictions, while 35% oppose.

On imposing price limits on futures, pension funds again recorded the strongest opposition, with 37% against and 26% in favor. On average, 31% of all respondents favored price limits, while 14% were opposed.

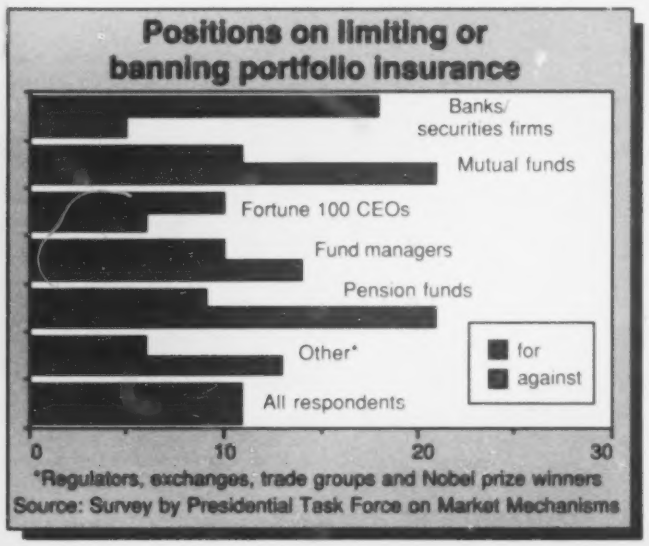
Respondents in general gave the most support to increasing margins on option and futures contracts, though pension funds still registered the strongest opposition. While 26% of the pension funds opposed such increases — by far the strongest opposition of any group — more pension funds — 35% — favored such raises.

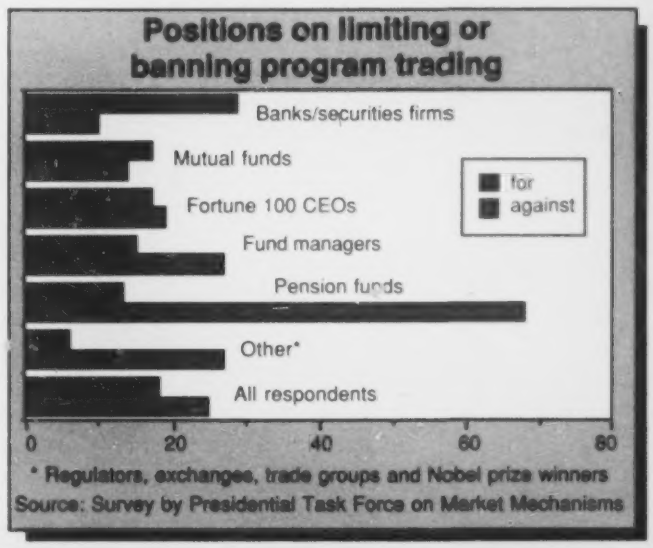
Fifty percent or more of the banks and securities firms, mutual funds and largest money managers favored increases in margins.

The task force's survey found that nearly three-quarters of the responding pension funds saw the value of their equity portfolios fall 20% or less on Oct. 19. By contrast, the Standard & Poor's 500 stock index fell 20.47% that day.

Seventy-four percent of the pension funds lost between 12% and 20%, while 4% lost between 5% and 12%. Only 22% of the pension funds lost more than 20% on

*Continued on page 14*




FEATURE

# Evidence proves hedging worked

By Eric J. Seff

I intend to examine the apparent disappointing performance of portfolio insurance programs in light of theory. An examination seems particularly appropriate because the attackers of portfolio insurance are claiming the theory didn't work. Evidence points to the contrary.

When the market dropped Oct. 19 more than 508 points, or 22.61%, on the Dow Jones industrial average and 57.86 points, or 20.47%, on the Standard & Poor's 500 stock index, many portfolio insurance managers were unable to implement the sales of assets or futures at levels they previously had targeted. As a result, portfolios were more fully invested and did not benefit from as much protection as was planned.

This lack of execution is used as evidence the theory didn't work. A re-examination of the theory shows something else. What was actually experienced was the cost of increased volatility.

Volatility is a reflection of the level of the market's fluctuation. One popular way of looking at it is to measure the daily percentage changes of the market and calculate their mean. The standard deviation of the daily percentage changes about the mean is the number used as the daily volatility. Daily volatility can then be annualized by multiplying the daily volatility by the square root of the number of trading days in the year.

During the 27-year period from the start of 1959 (when Chase Investor Management Corp.'s data base begins) to the end of 1986, the average daily return of the market defined as the S&P 500 was 0.022% with a daily standard deviation of 0.79%. The annualized volatility was 12.61%. The statistics mean that two-thirds of the time the daily change in the market was expected to be 0.022%, plus or minus 0.79%. That is an expected range in return for the market any day of between 0.812% and −0.768%. As a result, the market's daily expected change was less than 1%.

For the 10-day period ended last Oct. 29, the average daily return was −1.97% and the daily standard deviation was 9.034% (an annualized 143.691%).

This means about two-thirds of the time the daily change in the market was expected to be in the range of −1.97% plus or minus 9.034%, or in the range between 7.064% and −11.004%.

The increased volatility was reflected in an increased cost of portfolio insurance.

Portfolio insurance programs can be implemented two ways: dynamically and statically. Dynamic implementation involves changes of investment exposure that are made during the course of the program to emulate the effect of purchasing an option. Static programs actually purchase the option. The latter program is considered static because the portfolio need not be adjusted during the life of the program except for rolling over.

Eric J. Seff is managing director at Chase Investors Management Corp., New York.

Portfolio insurance programs implemented dynamically have a cost based upon the actual volatility experience during the life of the program. Those implemented statically have a cost based upon premiums paid for options. A premium reflects implied volatility; once paid, that aspect of cost is locked up until expiration of the option.

Volatility is the single most important influence on hedging cost.

Most portfolio insurance programs were developed using historical data to reflect hedging costs. Market volatility, or standard deviation, of 12.6% during the 27-year period produced an average hedging cost of 3½% for a one-year at-the-money put.

However, for the first nine months of 1987, volatility had been running at closer to 16% with an implied cost of hedging of 4.6%. The expectations of both buyers and producers of portfolio insurance had been for continued volatility around that level.

Their expectations were not fulfilled. The market crash was accompanied by a tremendous increase in volatility. In the 10-day period ended Oct. 29, volatility shot up to an amazing 143% annualized rate. The corresponding theoretical hedging cost for this level of volatility is an astounding 47.7%.

Consider the ramifications of such a number. At 16% volatility, purchasing a put or creating one dynamically would have cost 4.6%. But at 140%, the cost is 47.7%. That's a very expensive hedging cost even though it is fair in the theoretical sense.

To protect an asset worth $100, you would be required to pay $47.70 for a put. Your asset must appreciate by 47.7% to overcome the cost of the put.

I would argue the difficulties experienced by dynamic hedgers are nothing more than the effects of living in a 140% volatility world when expectations had been based on a 16% level.

Most investors would not choose to employ portfolio insurance at these high levels of expected costs.

Does this mean portfolio insurance didn't work? Of course not. It does mean, however, that it might turn out to be increas-

*Continued on page 14*

# Hedging works

*Continued from page 13*
ingly expensive as volatility rises.

While this might not be much comfort to an investor who experienced a larger than expected loss, it is the correct explanation for what happened.

Well then, if portfolio insurance is too expensive, what else can the investor do?

Portfolio insurance involves buying an option, or creating one. In periods of high volatility, however, options might be undesirably expensive. If an option is too expensive to buy, why not sell it?

Selling options can be implemented by selling puts on the cash that was raised in reducing exposure to the risky asset.

A put at 47.7% might be too expensive to buy, but could present a very attractive selling opportunity. In an unchanged market, the put writer will gain by the amount of premium sold and collect interest on the cash, too.

A loss in this strategy can occur if that market declines more than an amount equal to 47.7% plus the interest income. In that case, the investor will buy stocks — at a loss.

Put writing reintroduces stock risk to the portfolio, but this can be used to determine the amount of cash to raise in the first place.

On the other hand, maybe you don't want to sell options; you only want to buy them. I've already established there are volatility levels at which one might be unwilling to pay for a "normal" one-year put, but you still have two other options:

- buy a put with a lower strike price, i.e. a higher deductible for your portfolio insurance "policy." The cost of this put will be lower and its level of protection will also be lower; or
- buy a put with a longer time horizon. Although a two-year put might cost more than a one-year put, its cost is not twice as much; therefore the cost per year is less.

**The deductible for "insurance"**

| | Cost per year | | |
|---|---|---|---|
| Deductible | One-year put | Two-year put | Three-year put |
| 0% | 9.62% | 6.09% | 4.54% |
| 5 | 7.4 | 5.01 | 3.85 |
| 10 | 5.51 | 4.04 | 3.21 |
| 15 | 3.93 | 3.18 | 2.63 |
| 20 | 2.68 | 2.44 | 2.11 |
| 25 | 1.73 | 1.81 | 1.66 |

To illustrate the economics of a higher deductible I have chosen various strike prices for one-, two- and three-year puts. Assumptions include a 30% volatility with a 7.1% interest rate and 3.1% dividend yield.

As illustrated in the accompanying table, the greater the deductible, the lower the cost of the put — just like real insurance. Don't become euphoric when you first notice the dramatic reduction in costs: these options cost less because they are worth less. ■

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# Market

*Continued from page 13*
Black Monday.

By contrast, 28% of the mutual funds and 25% of the asset managers lost more than 20% on Oct. 19.

Psychological and technical factors were cited by the groups surveyed as the most important factors for the Oct. 19 crash. Each factor received 40% of the responses, while fundamental factors received only 20%.

But fundamental factors were cited by 77% of the respondents as the most important reason for the market decline the week preceding the Oct. 19 crash, compared with 17% for psychological and 6% for technical factors.

Pension funds by far leaned on psychological factors as the cause of the Oct. 19 crash.

Sixty-six percent of the pension funds — more than any other group — cited psychological factors. On the other hand, only 13% of pension funds cited technical factors, the least of any group surveyed.

The pension fund reaction was in stark contrast to other groups surveyed, which spread the blame for the Oct. 19 crash about evenly between psychological and technical factors.

Of the psychological factors most often cited by all groups as a cause of the Oct. 19 crash, panic was tops, followed by erosion of confidence in U.S. policies, investor nervousness and fear of the New York Stock Exchange closing. Pension fund reaction on psychological factors wasn't broken out separately.

Of the technical factors most often cited as a cause of the Oct. 19 crash, pension funds listed portfolio insurance as the most important (80%), stock index arbitrage as second (45%) and program trading as the least (25%).

Of the fundamental factors cited as the most influential in causing the market decline the week before Oct. 19, the groups ranked in importance rising interest rates, trade or budget deficits, overvalued bull market, declining value of the dollar and overall change in economic outlook.

Among the groups surveyed, responses came from seven of 15 Nobel prize winners, two of 12 discount brokers, 43 of the Fortune 100 chief executive officers, nine of 17 federal regulatory organizations, and 18 of 50 mutual funds.

Members of the the task force were appointed by President Reagan. ■

REAL ESTATE

# Commitments up 52.6%

By John Covaleski

Tax-exempt institutional investors committed 52.6% more to equity real estate managers during the first 11 months of 1987 than they did a year earlier, a *Pensions & Investment Age* survey shows.

*P&I Age*'s annual Scorecard shows the managers received additional commitments of about $10.85 billion between Jan. 1 and Dec. 1 of last year, vs. $6.879 during the same period of 1986.

The survey excludes gains from property appreciation.

The 52.6% increase was due to a variety of factors:

- With a 5-year-old bull stock market, a pension fund's assets rose, meaning more dollars had to go into real estate to maintain the same target asset allocation.
- Many fund executives decided to move into direct real estate investments, doing so without eliminating all of their commingled fund investments.
- Pension funds committed about $2 billion to the purchase of Cadillac Fairview Corp., a Toronto development company that was the largest real estate transaction ever.

The top 10 managers in the survey accounted for $8.689 billion, or 80.2%, of the total new real estate allocations. 1986's top 10 accounted for $4.682 billion, or about 68%, of the total.

Pension funds have moved to direct separate account investments, noted executives from several of the top 10 management firms.

David Glickman, president of Heitman Advisory Corp., Chicago, which ranked third in 1987 after finishing No. 1 in 1986, said two-thirds of his firm's $1.1 billion in new real estate contributions were from separate account business.

**Most new real estate equity business**

| Firm | $ millions |
|---|---|
| JMB Institutional Realty | 1,926 |
| Copley Real Estate Advisors | 1,240 |
| Heitman Advisory | 1,100 |
| Equitable Real Estate Investment | 991 |
| Richard Ellis | 670 |
| LaSalle Advisors | 618 |
| Boston Co. | 608 |
| Jones Lang Wootton | 600 |
| TCW Realty Advisors | 478 |
| RREEF | 458 |

Richard Ellis Inc., New York, which only handles separate accounts, reported $670 million — ranking it fifth — in new contributions in 1987, up from $301 million, and sixth place, in 1986.

And Copley Real Estate Advisors, Boston, which ranked second with $1.24 billion in new contributions, had about $600 million of that in separate accounts. The remainder is in the Developmental Properties Account and Copley Institutional Investors commingled funds. Copley was No. 3 in 1986 with $775 million in new accounts.

"There's a trend where the big players with significant core portfolios want separate accounts to have better control," added Leslie Farmer, a vice president with JMB Institutional Realty, Chicago.

JMB led all managers with $1.926 billion in contributions, but gained just $110 million in separate accounts. JMB finished No. 8 in 1986, with $261 million.

JMB raised $1.5 billion for the purchase of Cadillac Fairview and Copley raised $500 million in separate accounts from two clients for the portion of the Cadillac Fairview portfolio that JMB did not buy (*P&I Age*, Sept. 21).

The Cadillac Fairview deal underscores institutional investor interest in retail real estate during 1987. JMB's acquisition included 31.55 million square feet of existing and planned retail space.

JMB reported 44 new clients in 1987, the most reported of all the real estate managers, followed by Copley, with 37.

With the top 10 managers got the lion's share of new commitments to real estate, investors apparently are placing their assets with a select group of managers.

Paul Saylor, principal in Institutional Property Consultants Inc., Atlanta, and William Ramseyer, president of Pension Realty Advisors, San Francisco, both said the trend will continue, although the managers with the most money

*Continued on page 16*

## Milwaukee building purchased

A joint venture of the $44 billion California Public Employees' Retirement System, Sacramento; the $15.6 billion State of Wisconsin Investment Board, Madison; Equitable Real Estate Management Inc., New York, and developer Trammell Crow Co., Dallas, paid $195 million cash to First Wisconsin National Bank of Milwaukee for the First Wisconsin Center, a 42-story retail, office and parking garage complex in Milwaukee. Equitable arranged the deal. The site has 1.2 million square feet of rentable space and includes adjoining land that makes it suitable for further development.

# Buying spree set for PRISA

## Strategy: Economic diversification

By John Covaleski

NEWARK, N.J. — The Prudential Realty Group, Newark, N.J., is launching a new investing strategy for its $3.884 billion Prudential Property Investment Separate Account open-end real estate fund, which lost a net $878 million in client investments for the year ended Sept. 30.

PRISA, which acquired no property in 1987, will buy between $750 million and $1.2 billion in properties over three years to help implement the strategy. Sales of properties already owned by PRISA will help pay for the acquisitions.

The strategy includes a new methodology for determining how to diversify the portfolio's holdings, based more on the economic characteristics of markets, than on geography.

Prudential officials are meeting with clients to discuss the strategy.

Clients seemed heartened by PRISA's approach. "I like diversifying by economic criteria rather than just geography; the economy drives real estate, not geography," said Allan Steinkamp, vice president of Fiduciary Trust International, which manages the investments of the $7 billion United Nations Staff Joint Staff Pension Fund, New York.

Mr. Steinkamp said he had been "disappointed" in the returns from PRISA. The U.N. fund has about $100 million invested in PRISA.

"I'm not saying we'll put more money in PRISA, but I will be looking at this new

*Continued on page 16*

**Under the new strategy, managers of Prudential's Property Investment Separate Account will buy more retail properties such as the Winrock Mall in Albuquerque, N.M., which already is part of PRISA's holdings.**

WRAP-UP

### *Tokyo rents still high*

NEW YORK — In contrast to Tokyo and London, office costs in New York are comparatively inexpensive, according to the latest survey of world office rental levels by Richard Ellis Inc., New York.

The semiannual survey compares total costs — rent, common area maintenance, taxes and operating expenses — in 21 major office markets.

Tokyo tops the list at $154 per square foot in total occupation costs, followed by London (city), $138; London (West End), $99; and midtown Manhattan, $62.50.

Costs in Tokyo have stabilized in the past six months, according to the Ellis report, while London rents continue to rise, fueled by demand for office space after the deregulation of the United Kingdom's financial markets.

### *On the auction block*

CHICAGO — Real estate auctions conducted by Sheldon Good & Co., Chicago, generated sales of $43.2 million during a three-month period, according to Gordon J. Greene, president of Real Estate Auctions Inc., a Good subsidiary.

The nine auctions in 10 cities included the sale of 300 commercial, industrial and residential properties. Auctions in Dallas and Houston sold $8.64 million properties.

# Buying spree

*Continued from page 15*

strategy," he said.

Albert W. Kirschbaum, investment manager of the $1.3 billion pension fund of Bechtel Power Corp., San Francisco, an investor in PRISA since 1980, said the strategy is an "important step" in the evolution of real estate investing.

PRISA's total return for the year ended Sept. 30 was 5.22%, according to PRISA's annual report. That trailed the FRC Property Index's return of 5.5%. The number of investors in PRISA during that period dropped to 257 from 297; withdrawals totaled $922 million for the same period; new deposits, $43.6 million.

The new strategy is not a reaction to the withdrawals, said Charles R. Lightner, vice president and senior portfolio manager of Prudential Realty. Instead, he said, its aim is to make PRISA more able "to provide diversification at a risk level suitable to clients."

The traditional method of geographic diversification, in which the country is divided into four regions and acquisition decisions are based on spreading portfolio holdings over those regions, is "naive," he said.

David G. Shulman, a vice president in real estate research for Salomon Brothers Inc., New York, which assisted Prudential with its strategy, said, "This brings more coherence to real estate diversification." The four qadrant approach is too broad to make use of economic factors, he said.

Consultants' reaction to the Prudential strategy was mixed.

Ronald A. Karp, president of Ronald A. Karp Associates, Summit, N.J., called it "much ado about nothing." He said local market economics always have been considered by managers in making acquisitions.

Barbara Cambon, principal in the San Diego office of Institutional Property Consultants Inc., said investors look at local economic factors but don't usually compare the local factors of several different markets in determining an overall portfolio. She likened the Prudential strategy to a "top-down" approach used by equity managers in selecting stocks, and said real estate's traditional approach is more "bottom-up."

"Prudential's been able to quantify the relationships of economics and geography. That's an important step forward," Ms. Cambon said.

Mike Young, a manager with Pension Realty Advisors Inc., San Francisco, said Prudential's more-detailed approach should be a vast improvement over the "never really appropriate" four quadrant style.

But Mr. Young and others said Prudential executives could have difficulty finding $1.2 billion worth of institutional-quality real estate to acquire in three years.

Where PRISA will buy and sell hasn't been determined.

PRISA's new criteria will be the role of a market in the overall economy; the market's dominant employment characteristics; and how employment growth is affected by national business cycles, such as a recession.

Subcategories for the first criteria include whether the activities within the market have a national, regional or subregional effect; or whether the market's driving force is dominated by the government, such as a state capital or city with military installations.

Dominant employment characteristics include whether the market is dependent on one industry or one type of work force.

Under the new approach, PRISA will avoid heavy investments in markets sharing the same economic criteria. Investing in Los Angeles and New York would provide geographic diversification, but wouldn't meet the diversification criteria of the effect on an economy as both cities have national effect.

Mr. Lightner said this strategy could have spared the recent crisis in which some managers found themselves overweighted in properties in oil-dependent markets. Real estate money managers could have invested in the Southwest to get geographic diversification, but might not have considered that all were oil industry dependent, meaning they all suffered when that industry plunged.

The criteria in the Prudential model would have called for investing the Southwest, but would have discriminated against placing too many investments in one-industry markets.

The PRISA strategy also calls for change in the mix of property types over three years. The emphasis will shift to apartment, retail and industrial property and away from offices.

Offices as a percentage of total holdings will go to about 40% from 49.9% as of Sept. 30; apartments will go to about 10% from about 5.5%; retail will go to 20% from 16%; industrial to 20% from 17% and hotels/motels to 10% from 9.2%. The existing and revised allocation also has 2.4% in land and agriculture. ■

# Up 52.6%

*Continued from page 15*

might have too much to make the optimum investments for their clients.

"There's too much loot in too few hands," said Mr. Saylor.

Jack Phillips, managing director of Copley, said it is conceivable managers taking in substantial contributions could compete against themselves.

Ms. Farmer said managers can offset this by refusing to accept new clients if "their plate is too full." She said in 1987 JMB answered far fewer requests for separate account business than it received.

This year's Scorecard also showed continuing investor preference for specialized real estate managers over insurance companies, which once dominated the real estate investment industry.

Equitable Real Estate Investment Management, Atlanta, a subsidiary of Equitable Life Assurance Society of the United States, was the only insurance company affiliate to make the top 10. Equitable reported $991 million in contributions (all fully invested), ranking it fourth, up from $814 million it reported in 1986.

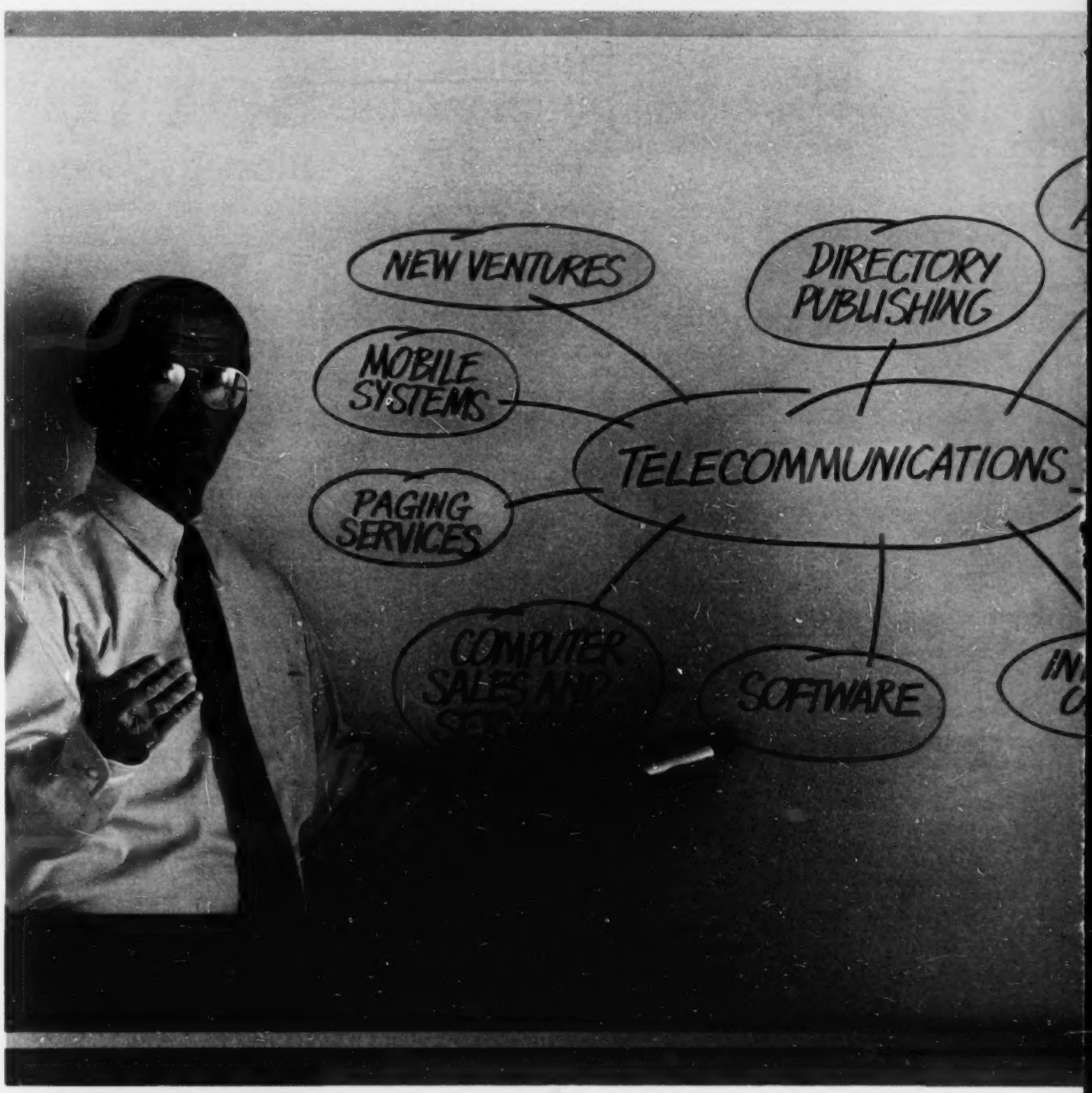
Aetna Life Insurance Co., Hartford, Conn., ranked 11th with $316 million in net assets; in 1986 it ranked third with $511 million.

Aetna; J.W. O'Connor & Co., New York; and Eastdil Realty Inc., New York, which did not answer the 1987 report, were the only managers that didn't repeat in 1987.

J.W. O'Connor reported raising no new money. Nancy I. Lashine, vice president, said the company intentionally held back on fund raising until its retail trust was fully invested.

New to the top 10 in 1987 are: LaSalle Advisors Inc., Chicago, which placed sixth with $618 million; Boston Co. Real Estate Counsel Inc., Boston, No. 8, $478 million; and RREEF, No. 10, $316 million. ■


BellSouth



INTERNATIONAL

# Foreign bonds rise to top

By Marlene Givant

The popularity of foreign bonds stole the show in attracting new business during the 11 months ended Dec. 1, according to the *Pensions & Investment Age* Scorecard of investment managers' new business.

Active managers for the first time attracted substantial international fixed-income business in 1987. In fact, during the first six months of the year, U.S. tax-exempt funds committed at least $1.472 billion to the area largely in order to diversify domestic fixed income (*P&I Age*, Sept. 21).

Last year's show stopper, international stock index funds, leveled off in the 11 months but maintained its momentum, with index leader State Street Bank & Trust Co., Boston, alone gaining the most international new business in terms of assets with $1.31 billion.

State Street wooed assets from more new clients for its international stock index funds than the two top active international managers combined during the period.

The phenomenon parallels the domestic boom in indexation, but with one firm enjoying the vast majority of the new business.

But some observers think growth of international passive management will slow. "People are continuing to be convinced of the value of active management. Passive management has reached as far into people's portfolios as it's likely to go," said Chris Carter, a director of WorldInvest Ltd., London, an active manager.

The survey polled international and global equity and bond managers on new business including contributions from new U.S. tax-exempt clients and additional contributions from existing clients during the period. The figures did not include market appreciation, dividends and interest.

**Most new international/global business**

| Firm | Total | Equity | Fixed |
|---|---|---|---|
| State Street Bank & Trust | 1,310 | 1,310 | 0 |
| WorldInvest* | 779 | 379 | 400 |
| Posthorn Global Asset | 395 | 215 | 180 |
| Baring Int'l Investment | 389 | 226 | 163 |
| Warburg Investment Mgmt. Int'l | 242 | 177 | 65 |
| Morgan Grenfell Investment | 228 | 228 | 0 |
| PCM Int'l | 218 | −5 | 223 |
| Oechsle Int'l Advisors | 211 | 211 | 0 |
| Schroder Capital Mgmt. Int'l | 200 | 200 | 0 |
| Wells Fargo Investment | 195 | 195 | 0 |

* As of December 31

State Street, which managed $23.8 billion in total U.S. tax-exempt assets as of Dec. 31, led the growth for the second year in a row and gained nine new clients.

"It (fixed income) went from a product people weren't terribly interested in to one that came into its own in 1987. This was as much true for us as for the industry," said John F. McNamara, director of Baring International Investment Ltd., London, which manages $163 million in fixed income.

The growth and diversity of international investments has accelerated since 1986; for the 11 months ended Dec. 1, new international/global business totaled $7 billion, almost all in equities. The amount surpassed last year's gain of about $4.9 billion.

The top three active managers for new business were WorldInvest, formerly BA Investment Management International Ltd., with a healthy $779 million gain as of Dec. 31 — $379 million in equities and $400 million in fixed income — and 14 clients; Posthorn Global Asset Management, formerly American Express Asset Management, New York, with $395 million, and nine new clients; and Baring, with $389 million and seven new clients. The firms managed $1.535 billion, $590 million and $1.472 billion, respectively, as of Dec. 31.

The majority of WorldInvest's 1987 new business was fixed income, accounting for $400 million of the firm's $725 million gain.

Similarly, fixed income comprised $180 million of Posthorn's and $163 million of Baring's increases.

Rounding out the Top 10, in descending order, were Warburg Investment Management International Ltd., London, with a gain of $242 million; Morgan Grenfell Investment

*Continued on page 22*

**"In the Hollow of the Great Wave of Kanagawa," from "The Thirty-Six Views of Fuji" by Hokusai, sold for more than $1 million — almost double what British Rail expected to receive.**

# Print auction brings bonus

By Holly Smith

LONDON — The $10 billion British Rail pension fund has found beauty truly is in the eyes of the holder.

In its third major sale of artwork from a $67 million art portfolio, the fund raked in $2.5 million for Japanese prints that Sotheby's auctioneers had expected to bring in between $1.4 million to $1.7 million.

In fact, bidding reached record-breaking levels for some of the works of art. A record for a single Japanese print was set when a picture of a tea shop waitress sold for $390,000. And an album of 41 prints by Hokusai, which included "Thirty-Six Views of Fuji," was expected to fetch $566,000 but sold for more than $1 million. "One of these views, 'The Great Wave of Kanagawa' . . . had become virtually synonymous in the West with the idea of the Japanese print," a Sotheby's spokesman said.

Not surprisingly, given the strong yen and the subject matter, Asian buyers were represented heavily at the sale. The Hokusai album of prints was sold to International Fine Art Consultants Ltd., Hong Kong. The same firm also paid $175,000 for a print by Utamaro called "Making-Up After a Bath." Another buyer was Seibu Department Stores Ltd., Tokyo.

The sale is part of a planned liquidation of the art portfolio, whose book value is $67 million; fund officials declined to reveal the market value. Liquidation might take as long as 10 years, said David Andrew, company secretary of the British Rail Pension Trustee Co. Ltd., London.

The sales began in earnest with the sale of old master prints for a total of $3.3 million last June, although smaller sales had happened before then (*Pensions & Investment Age*, June 15).

In November, the fund sold 27 silver items it had held for 11 years for a total of $1.8 million, which constituted a return of 3% per year. No further sales are ex-

*Continued on page 22*

# Takeover dispute

## Stock purchase fuels talk of regulation

By Milton Smith

SOUTH YORKSHIRE, England — Use of pension funds in fighting hostile takeover bids might lead to further regulation in the United Kingdom of plan investments in their sponsoring companies.

The purchase last month of 100,000 shares of MS International PLC, South Yorkshire, by the company's pension fund just days before a $45 million hostile takeover bid by Dobson Park Industries PLC, Lancashire, has brought the issue to a head.

The U.K. issue mirrors that raised in the United States in the early and mid-1980s, when some corporate pension funds purchased large blocks of their sponsoring companies' stocks to avert takeover attempts. In the most notable of these cases, U.S. courts ruled Grumman Corp.'s pension fund trustees violated their fiduciary duty by purchasing company stock at a premium when the company faced an ultimately unsuccessful bid by The LTV Corp. (*Pensions & Investment Age*, March 5, 1984).

Dobson Park, a mining equipment and industrial electronics group, launched its bid Jan. 12 for MS, which makes defense and mining equipment. Michael Bell, chairman and chief executive of MS, who owns about 5% of the company's stock, insists management is determined to stay independent.

But one of the most controversial aspects of the bid is the Jan. 8 purchase of MS shares by the company's pension fund. The fund's stake already exceeded the U.K.'s statutory 5% disclosure level, and thus was required to announce details of the purchase just before the bid.

In a statement to the stock market on Jan. 18, the MS fund confirmed it had lifted its holding to 6.08% from 5.69%. The shares are understood to have been purchased through Phillips & Drew at $1.33 a share, or about 16 cents above the value of MS at the beginning of January. But MS shares subsequently rose to $1.96 after the bid was launched.

Holdings by the fund, Mr. Bell and Bell family interests comprise about 20% of the company's stock.

Hill Samuel, the merchant bank advising Dobson Park, might ask the London Stock Exchange to investigate the purchase of MS shares by the pension fund, sources said, although that might be a tactical maneuver.

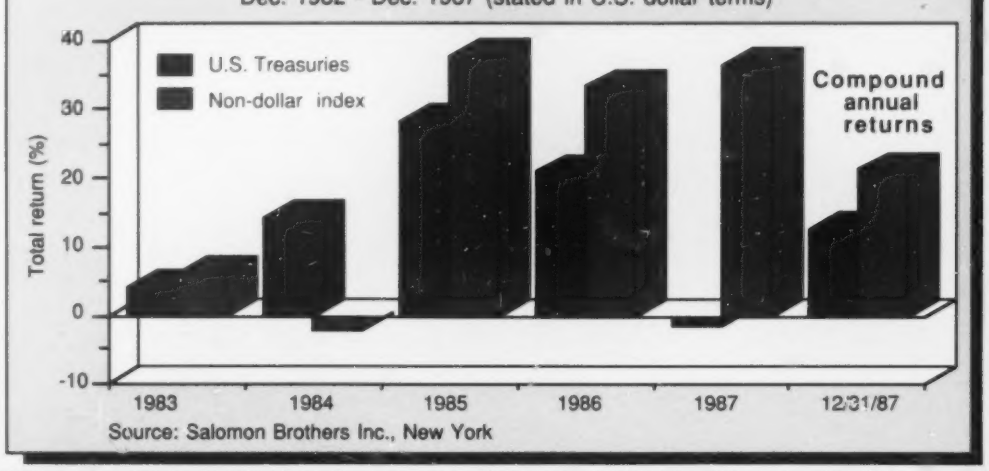
The MS affair only strengthens the voice of those who argue such investments should be subject to stricter regulatory controls, either through voluntary guidelines issued by the National Association of Pension Funds or through legislative changes.

Current law requires a pension fund whose investment in its sponsoring company's outstanding stock hits 10% to notify the Superannuation Fund's Office —

*Continued on page 22*

**U.S. Treasuries and non-dollar government bond returns**

Dec. 1982 - Dec. 1987 (stated in U.S. dollar terms)




Source: Salomon Brothers Inc., New York

# Foreign bond

*Continued from page 20*
Services, London, with $228 million; PCM International, Newark, N.J., with $218 million, all in fixed income; Oechsle International Advisors, Boston, with $211 million; Schroder Capital Management International, New York, with $200 million; and Wells Fargo Investment Advisors, San Francisco — the only other passive manager to break into the Top 10 — with $195 million.

While few of the top active managers beat the Morgan Stanley Capital International Europe Australia Far East index over the one-, three- or five-year periods ended Dec. 31, they still posted strong gains.

WorldInvest, which returned 5.42% in 1987, sparkled over longer periods, returning a compound annualized 49.8% for the three years and an annualized 30.68% for five in international equities. This compares with the EAFE's 25.2%, 49.4% and 35.1%, respectively.

The firm's international bonds returned 34.95% for one year, a compound annualized 37.67% for three years and 20.75% for five years. The Salomon Brothers Non-U.S. Government Bond index returned 35.15% for the year and 33.83% for three years in U.S. dollar terms. The index does not have five-year figures.

WorldInvest's new clients included GTE Corp., The Kroger Co., Harvard University, National Starch & Chemical Corp., Pan American World Airways Inc., Pechiney Corp.; Trans World Airlines Inc.; and McKinsey & Co. Inc.

Posthorn returned 2% for the 12 months and a compound annualized 45.54% for the three years in international equities. It had no five-year equity figures.

In international fixed income for the year it returned 35.3%; Posthorn has no longer-term international fixed figures. But for global fixed income, it returned 24.66% for one year and a compound annualized 25.7% for three years. Again, it had no five-year figures. In comparison, the Salomon Brothers World Government bond index returned 18.41% for one year and an annualized 22.85% for three.

Posthorn's new clients include Lone Star Industries Inc., American Telephone & Telegraph Co. and Pacific Gas and Electric Co.

Baring's international equity accounts returned 16.1% for one year, a compound annualized 43% for three years and 30% for five years. Its international bond return was 35.3% for the one-year period, it was the first year in bond management.

Kaiser Aluminum & Chemical Corp., Atlantic Richfield Co. and BP America were among Baring's new clients.

Morgan Grenfell's foreign equity accounts earned 12.4% in 1987, an annualized 42.1% in the three years ended Dec. 31 and 28.4% for the five years. Its international fixed-income returns were 38.4%, 35.2% and 20.2% for those periods, respectively.

Warburg's international equity composite rose 11.2% for one year, an annualized 43.7% for three years and 30.1% for five.

Global fixed income was up 22.9% in 1987 and an annualized 29.6% for the two years ended Dec. 31, the longest period available. International fixed income rose 35.5% in 1987. ■

# Prints

*Continued from page 20*
pected this year, and later sales will be stretched "over a period of years," said Mr. Andrew.

He said the Japanese art had been purchased 10 years ago for roughly 400,000 pounds ($700,000 then).

The artwork was bought when the United Kingdom had exchange controls that prevented investment abroad and when the stock market was very weak. Also, some of today's desirable investments, such as index-linked gilts (government bonds that are tied to inflation) hadn't yet been invented.

The results of the sale meant the prints had brought an annual return of 12% — or 3% above the inflation rate.

"We didn't lose money by this," Mr. Andrew said of assembling the print collection. He said the appreciation obviously did not match what the stock market had risen to before October, but the investment outperformed fixed-interest instruments.

"We're not disappointed, it hasn't proved to be a disaster — it has given us a real return."

The fund is still waiting to see if it will face any taxes on the profits from the sales. "It's a gray area," said Mr. Andrew. ■

# Takeover

*Continued from page 20*
the industry group that regulates pension funds — and receive authorization before purchasing additional shares.

The Inland Revenue — the equivalent of the U.S. Internal Revenue Service — is said to be scrutinizing the matter, but has not yet issued any statements.

The investment committee of the NAPF has responded to criticism of pension funds investing in their sponsor companies — particularly in takeover situations — by setting up a special group on the subject. It also is polling its pension fund membership to ascertain their views.

The association's findings are expected to be ready for its annual investment conference this month and it is rumored the organization might come out in favor of tighter controls.

The association's inquiry was triggered in part by another case — that of Bryant Holdings PLC, a West Midlands-based housebuilder. Its pension fund bought a 1.27% stake in Bryant when the company was the target of an unwelcome — and unsuccessful — bid from English China Clays PLC, Cornwall. ■

# On the move

*Continued from page 21*
marketing and client services with Fred Alger Management Inc., New York, has joined Simms Capital Management, New York, as a director of marketing.

She will concentrate on attracting U.S. pension fund business to the global manager, which runs $400 million, mostly for individuals.

Ms. Woodall said she joined Simms Capital Management for the promise of the firm and its area of expertise.

"The most important reason is that it is an uncommon group of investment professionals," Ms. Woodall said.

"Also, the majority of pension fund demand and the growth area over the foreseeable future will be the international and global arena," she said.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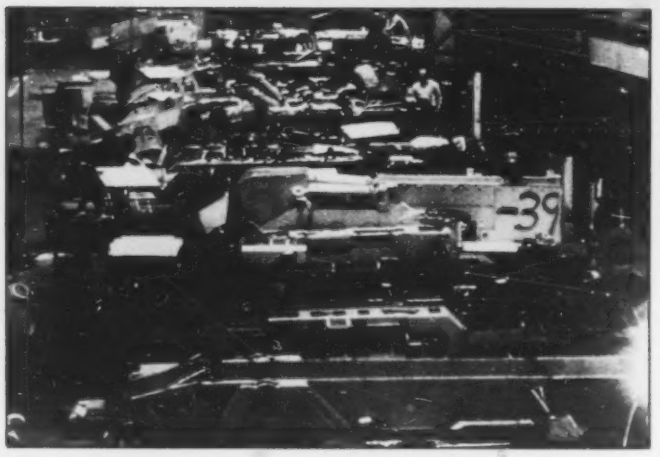


Things are looking better for Joy Technologies. Increased sales and reduced debt are easing the fears of investors worried about performance since the leveraged buy-out last year.

# LBO success moves closer

## Joy Technologies nearing goal

By Brad Rudin

PITTSBURGH — Joy Technologies Inc., a precariously financed leveraged buy-out, has cleared one hurdle by selling assets and reducing debt, and increased its chances of becoming a textbook success story.

The company also increased its credibility by posting strong quarterly results, although skeptics about its long-term prospects still exist.

Having reduced the debt burden to more manageable levels by using the proceeds from the sale of assets, Joy faces the steadier work of wringing enough out of the remaining business units to meet post-leveraged buy-out interest expense and principal repayment obligations.

Joy's yield spread — like that of other high-yield companies — widened substantially after the Oct. 19 stock market fall. But the spread tightened last month after the company released its fiscal 1988 third-quarter report for the period ended Nov. 27.

The company's debentures recently traded at $93.50, up sharply from the $85 in December.

The third-quarter report eased investors' concerns about the company by noting increased sales and reduced debt.

'Joy's recently announced third-quarter results were encouraging: operating cash flows were 21% above the second quarter," according to the Jan. 18 Research Review, published by Donaldson, Lufkin & Jenrette Securities Corp., New York.

"Joy Technologies continues to improve its post-LBO performance," according to the Jan. 14 High Yield Sector Report, published by Kidder, Peabody & Co. Inc., New York. "Over the last two quarters, the company has increased its cash flow through significant margin improvements and has reduced debt through asset sales."

The company sustained a net loss of $4 million, negative $4.54 a share, on revenue of $135.1 million in the third quarter. Current operating results are not comparable to the same period last year because of the effects of purchase accounting and differences in the debt structure of the company for the current period, Joy said in its third-quarter 10-Q report.

Joy Technologies completed a $621 million leveraged buy-out of Joy Manufacturing Co. in February 1987, a transaction that left the successor company with a pro forma debt-to-capitalization ratio of 92% and the need to sell assets without too much delay.

Joy Manufacturing accepted the

*Continued on page 24*

# Tiffany's luster, glitter returning

By Marcia Parker

NEW YORK — Tiffany & Co., the internationally renowned retailer of jewelry and luxury gifts that went public less than a year ago, has shaped up financially and embarked upon an aggressive drive to make its prestigious products available throughout America and the world.

A lackluster performer when it was owned by Avon Products Inc., New York, and a money loser for two years after it was taken private in 1984 by William R. Chaney and a management and investor group, Tiffany's has turned around. The company has stemmed the losses that marred its high-class image and temporarily soured some Wall Street analysts on the 150-year-old retailer of high-priced jewelry, silverware, china, crystal and other glamorous merchandise.

Today, the black ink is flowing, sales and earnings are strong, an aggressive growth strategy is in place, business is expanding worldwide, a host of new products have been well received, the balance sheet is stronger and analysts are recommending Tiffany's stock.

"Our purchase recommendation of Tiffany's stock reflects the uniqueness of the company's name, a talented management team, the integration of sophisticated systems, the growth potential of products and distribution channels, and successful participation in meeting the needs of the rapidly growing affluent customer base," said Stacy Ruchlamer, who follows the company for Shearson Lehman Brothers Inc. Shearson co-managed Tiffany's initial public offering with Goldman, Sachs & Co.

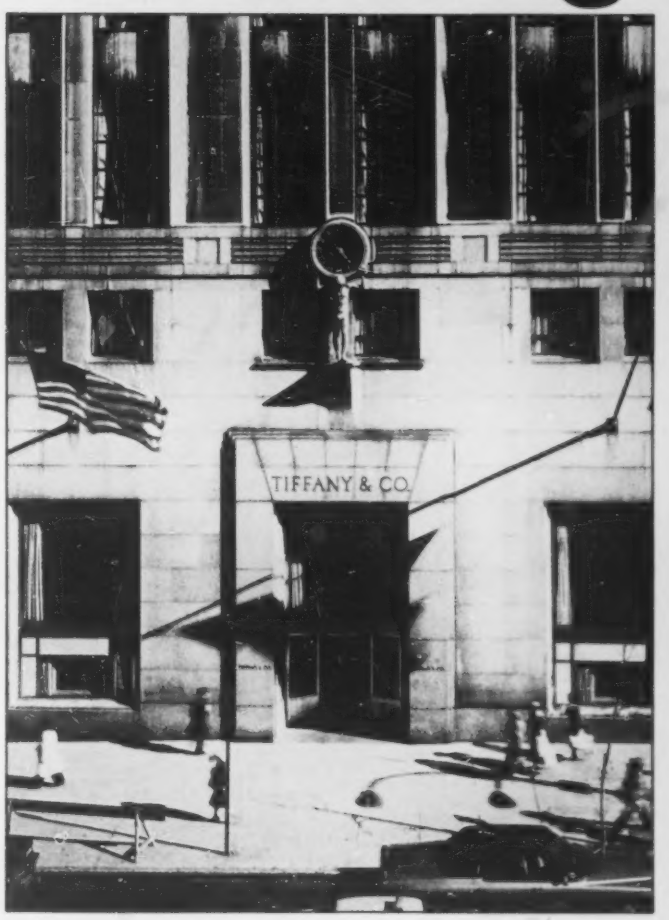
Tiffany's is a good example of how a buy-out often provides skilled managers-turned-owners with a chance to improve a division that was performing poorly as part of a large diversified corporation. As was the case with Tiffany's, the payoff eventually comes when the private company comes full circle by going public and investors recognize its strengths.

"After achieving very strong results through the first three quarters of 1987 and in our Christmas season, we remain optimistic as we enter 1988," said Mr. Chaney, Tiffany's chairman, whom analysts credit along with his management team for the turnaround.

"We expect to aggressively pursue our diversified growth strategies. These include expansion within our three channels of distribution through retail activities in the U.S., Europe and Japan, along with further market penetration in our direct-marketing business, both in sales to corporations and through our catalogues," he said. "Our growth strategy also calls for expanded selections of our product offerings. Of course we continue to monitor changes in the economy but are confident because of the strong appeal of Tiffany to our clientele."

For the first nine months of the year ended Oct. 31, Tiffany's net earnings were $6.5 million, vs. a loss of $108,000 in 1986. Sales rose 29% to $148.2 million, with U.S. retail sales up 26% and international sales up 75%. Unlike many companies, Tiffany's saw

*Continued on page 25*




The glamorous Tiffany's is financially gleaming again — earnings are booming, sales are strong and an aggressive growth strategy is regaining the confidence of analysts and investors.

# Corporate credit quality improving

**1987 credit rating changes**

| | 1987 | | 1986 | |
|---|---|---|---|---|
| | Up | Down | Up | Down |
| Duff & Phelps | 62 | 81 | 64 | 91 |
| Fitch Investors Service | 38 | 51 | 42 | 43 |
| McCarthy, Crisanti & Maffei* | 30 | 47 | 47 | 73 |
| Moody's Investors Service | 100 | 176 | 143 | 246 |
| Standard & Poor's** | 187 | 285 | 149 | 364 |

The numbers for Moody's reflect the number of issues affected by rating changes, while the data for the other rating agencies reflect the number of rating actions.

* At the end of 1986, MCM stopped rating below-investment-grade industrials
**Preliminary figures

Source: The rating agencies

By Brad Rudin

NEW YORK — Although downgrades still outnumbered upgrades, the credit quality of U.S. corporations improved in 1987 as the number of downgrades fell sharply and upgrades as a percentage of total actions increased.

But weak business conditions in a broad spectrum of industries will keep downward pressure on credit quality in 1988, Moody's Investors Service and Standard & Poor's Corp. reported.

At Standard & Poor's, preliminary numbers show upgrades accounted for 40% of the agency's rating actions in 1987 compared with 29% in 1986. Improvements in credit quality also could be seen in data from by Duff & Phelps Inc., with upgrades comprising 43% of that firm's actions in 1987 vs. 41% in 1986.

Moody's released data showing 36% of issuers it covered received a higher rating in 1987, compared with 37% in 1986.

Upgrades as a percentage of rating actions by McCarthy, Crisanti & Maffei Inc. remained steady at 39%; the number dipped at Fitch Investors Service to 43% in 1987 from 49%.

Utilities and financial institutions bucked the improving trend found in other sectors of the economy, Standard & Poor's reported. Some utility companies experienced regulatory and construction difficulties in 1987 while the industry as a whole confronted competitive pressures.

Bank credit quality remains vulnerable because of problem loans, and securities firms are challenged by the need to cut costs, according to S&P.

Special events — leveraged buy-outs, mergers or acquisitions, recapitalization and litigation — played a significant part in the

*Continued on page 24*

# LBO success

*Continued from page 23*

$35-a-share bid from a group led by Adler & Shaykin, a New York investment firm, after rejecting an unsolicited $31-a-share offer from The Pullman-Peabody Co.

Joy merged with Ecolaire Prime Inc. — a producer of ash removal systems — in an $19.8 million transaction completed last June.

Joy Technologies is a leading producer of underground mining machinery and also makes industrial air pollution equipment, ash handling systems for power plants, heavy duty elements of combustion systems and software for plant automation.

"I think overall we are pleased with where operations are today," said Eugene J. O'Sullivan, vice president and treasurer. "What we'd like to see is stronger performance on the part of the non-coal business; that's where the upside of the company's business is."

If Joy succeeds, the company will have defied the doubts of credit-rating analysts and established itself as a textbook example of a leveraged buy-out that survived Oct. 19, difficult fundamentals and a mountain of debt.

Although high-yield bond analysts at Kidder, Peabody and Donaldson, Lufkin & Jenrette gave Joy good marks after the company reported its third-quarter earnings, analysts at Moody's Investors Service and Standard & Poor's Corp. were less optimistic.

Last spring, Moody's gave a B1 rating to Joy's 13¾% senior subordinated debentures due 1999, while Standard & Poor's assigned a B– rating to those securities.

"Can their operations generate enough earnings? That's the tough thing to see," said Daniel R. DiSenso, an analyst at Standard & Poor's.

"They are not out of the woods yet," said John B. Morris Jr., a Moody's analyst. "They always have their back against the wall."

Still, the analysts saw some bright spots: solid management; stable fundamentals; lower interest expense; and Joy's leading position in the mining equipment manufacturing business.

Much of the good news comes from asset sales, which helped chop third-quarter fiscal 1988 debt to $458 million from $674 million.

A capture of between $40 million and $50 million of surplus pension assets expected in midyear should enable Joy to make another big dent in its shrinking debt load. That reversion, however, is the subject of a federal lawsuit by former employees. One of the claims in the suit, filed in December, is that plan participants and beneficiaries should receive assets for funded but not accrued benefits, before the company receives any assets, according to the 10-Q report.

The good news for Joy is the timing of the asset sales, which provided the basis of the leveraged buy-out. "Fortunately, Joy had agreements for its asset sales before the (Oct. 19) stock market crash and was not affected by declining asset values," noted the Kidder, Peabody report.

Third-quarter earnings before interest, taxes, depreciation and amortization were $18 million compared to pro forma second quarter EBITD of $16.2 million.

Cash flow from operations would be insufficient to meet the company's debt service requirements coming due before June 30, 1989, Joy acknowledged in June 1987 when it sold high-yield securities to pay down short-term debt associated with the buy-out.

Kidder, which co-managed the $185 million debt offering for which DLJ was lead manager, predicts the interest coverage ratio will be a "solid" 1.32 times interest expense for fiscal 1988. Joy will have an interest coverage ratio of 1.23 times for fiscal 1989, according to a projection in Kidder's Jan. 14 report.

"Coverage ratios were surprisingly good at 1X (one times) interest for the third quarter," according to the report published by Donaldson, Lufkin & Jenrette. Kidder put the coverage ratio for the company's third quarter of fiscal 1988 at 0.95 times interest.

Interest expense dropped $1.6 million to $18.9 million in the third quarter from $20.5 million (pro forma) in the second quarter, a decline that could have been bigger were it not for the timing of Joy's debt reduction, according to Kidder's report. Fourth-quarter interest expense should be pushed down to $15.5 million, Kidder predicted.

Joy improved its EBITD-to-revenue ratio to 13.4% in the third quarter from 12.6% and 6.5% the two previous quarters, both of which were calculated on a pro forma basis. Kidder projects a ratio of 13.5% in fiscal year 1988 and 14% in fiscal year 1989.

Asset sales and other actions will produce $312 million for the company, according to Joy's third-quarter 10-Q report, which noted $239 million of that already had been received. ■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# Corporate

*Continued from page 23*

deterioration of credit quality in the financial services sector for the first time, Moody's reported in the Jan. 18 issue of its Bond Survey. The agency cited Chemical Bank's acquisition of Texas American Bancshares and Transamerica Corp.'s purchase of Borg-Warner Acceptance Corp. as examples of restructurings that led to credit downgrades.

Moody's noted a broadening of the ranks of "fallen angels," companies whose ratings slipped below investment grade. Much of the decline in 1987 came from the restructuring of industrial companies, the agency reported, noting deteriorating fundamentals affected a smaller amount of the downgraded debt.

But Moody's also noted substantial improvements in the industrial sector. Last year's 'reborn angels' typified a positive undercurrent for U.S. industrials during 1987, as upgrades in that sector rose to their highest levels since the early 1980s. Moody's attributed the uptick in industrial credit quality to cost efficiencies and improvements in capital structure.

Moody's and Standard & Poor's offered cautious predictions about credit quality in 1988.

Downward rating pressure in 1988 would be felt by money center banks, securities firms, automotive companies, retailers, hospitals, oil companies, high-technology companies and some issuers of structured finance offerings, Moody's said. Improving fundamentals will lead to better credit quality for U.S. producers of steel, food and drugs.

Moody's predictions were based on expectations pointing to slow real growth, an uncertain dollar, a continued trade deficit, deterioration in the economies of the less developed debtor nations, deregulation of the financial markets and oil prices in a range between $14 to $17 a barrel. ■

STATISTICALLY SPEAKING

# Year closes with contrast

## Sectors flip-flop in rankings

By Trudy Ring

KANSAS CITY, Mo. — Stocks sensitive to interest rates were the best performers in the fourth quarter, while basic industry stocks led for 1987, according to DeMarche Associates.

In the bond market, telephone company bonds performed best in the quarter, while Yankee and foreign issues were tops for the year, according to the consulting firm's analysis.

The Standard & Poor's 500 stock index lost 23.4% in price in the quarter, with a gain of just 1.8% for the year. All stock returns are price only.

The basic industry sector was down 24.8% in the quarter, but it was the best of the S&P 500 on the year, gaining 8.4%.

This sector encompasses companies in the automotive, building material, chemical, electrical equipment, metal and transportation industries.

Interest-sensitive stocks lost 19.1% to outperform the market in the quarter; for the year, the sector was the worst performer, down 11.4%. The sector is made up of banks, savings and loans, insurance companies and large gas, electric and telephone utilities.

Energy stocks had the second best return for the quarter, down 21.6%. For the year, the sector gained 5.8%.

This sector comprises domestic and international oil companies and oil service and equipment.

Technology stocks lost 24.1% in the quarter, ranking third, and gained 6.2% for the year, ranking second. This sector covers the aerospace, drug, electronics and office equipment industries.

Stocks related to consumer spending did worst in the quarter, losing 25.5%, while ranking second lowest for the year, with a gain of 1.5%.

Household goods, food and beverage, tobacco, media, textile and retail stocks are in this sector.

The 10 best-performing industries in the quarter were electric utilities, down 7.3%; beverages, down 16.9%; telephone companies, down 17.4%; household products, down 18.3%; steel, down 18.5%; food packaging and processing, down 18.8%; international oil, down 19%; general machinery, down 21.1%; paper, down 21.2%; and forest products, down 21.3%.

The 10 worst-performing industries were oil service and equipment, down 37.6%; airlines, down 34%; building materials, down 31.7%; retailing, down 31.6%; containers, down 31.4%; banks, down 31%; textile products and apparel, down 30.9%; aerospace, down 30.8%; cars and trucks, down 28.2%; and tobacco, down 27.6%.

The top-performing individual stocks of the quarter were **William Wrigley Jr. Co.**, up 11%; **Southern Co.**, up 0.6%; **Comcast Corp.**, unchanged from the previous quarter; **Dominion Resources Inc.**, down 0.9%; **Pennzoil Co.**, down 1.2%; **Computer Associates**, down 1.5%; **Ohio Edison Co.**, down 2.4%; **Computervision Corp.**, down 2.6%; **Southern California Edison Co.**, down 2.8%; and **International Minerals & Chemical Corp.**, down 3.1%.

As rated by quality of the issuing companies, stocks rated as superior had the best performance in the quarter, down 20.5%. For the year, those rated below average gained the most, 5%.

As categorized by growth, stocks with low, stable growth had the best relative performance, down 14.6% in the quarter; and when ranked by yield, high-yielding stocks did best, down 20.2%.

The bond market, as measured by the DeMarche Pension Fund Bond Index of 6,000 issues, had a total return of 5.6% in the quarter, to finish the year up 3.2%.

It had negative returns in the second and third quarters.

Telephone issues were up 7.9% in the quarter to lead all sectors of the market, but they finished last for the year, with a 0.9% return.

Canadian issues were up 7.1% in the quarter, placing second, but next to last for the year, up 1.8%.

Utility bonds returned 7% in the quarter and 2.8% for the year.

Yankee and foreign issues were up 6.3% in the quarter, pushing them to first for the year with 5.6%.

U.S. government bonds gained 5.4% in the quarter and 2.8% on the year, while industrial bonds were up 5.3% for the quarter and 4% for the year.

Financial issues trailed in the fourth quarter with a 4.3% return; for the year, they were up 3.9%.

As ranked by quality, bonds rated AA had the best return in the quarter, with 5.8%; measured by maturity, those with maturities greater than 20 years performed best, gaining 6.9%.

# GIC rates drop during quarter

By Fred Williams

Rates on insurance company guaranteed investment contracts declined slightly in the fourth quarter of 1987, and industry sources view 1988 as a year of uncertainty for the GIC business.

"Rates were down a half to a quarter point in the last quarter, spreads over comparable Treasuries were narrow and we expect them to remain tight at least through the first quarter of 1988," said Doreen Belliveau, vice president at Lamberson Knight Securities, a Short Hills, N.J., GIC brokerage.

Until October, many GIC managers and brokers expected rates to continue to increase, said Mark Hanley, senior vice president at Kominz Co., a Playa del Rey, Calif., investment banking firm.

"Until Oct. 19, most people expected rates would continue to go up. On Oct. 5, a three-year top-of-the-market GIC, a $1 million bullet contract, was at 9.28%; on Oct. 12, it was 9.91% and on Oct. 19, it was 9.96%. On Oct. 26, it was down to 9.16%." From that point, rates declined steadily until hitting bottom Nov. 30 at 8.63% and moving back to 8.71% by the end of the year, he said.

David Rubin, senior director at the Beverly Hills, Calif., investment banking firm of Chambers, Dunhill, Rubin & Co., said GIC rates had a "definite and substantial" decrease in the fourth quarter and "several (insurance) companies were not participating in the traditional year-end bidding because of the stock market crash."

Some GIC managers expect the market to contract in 1988 and look for GIC capacity pressures to build.

"My real concern is looking forward into 1988. Given the overriding conservatism of the insurance companies, supply problems and a volume increase with people moving to GICs, I think things will tighten even more and we could have a real capacity problem by the fourth quarter of 1988," said Mike Hoover, GIC portfolio manager at Capitoline Investment Services Inc., Richmond, Va.

"A lot depends on how the economy goes and the type and availability of investments to insurance companies for the GIC proceeds.

"In terms of 1988 market characteristics, the traditional mainline (insurance) carrier, the stronger carriers, are very conservative in terms of their pricing now. Some smaller or newer carriers may have spreads which are much higher than the comparable Treasuries. That situation creates a greater need to understand what's going on with that group. . . . If a company is offering 50 to 75 basis points above everyone else, that should cause you to look a lot more carefully at their ability to underwrite and invest. They could be shaving their risk charges or using junk paper."

The effects of the equity market crash could linger in the GIC market, said Gene Gochenour, president of GIC Inc., Beaverton, Ore.

He said spreads might continue to narrow between GICs and comparable Treasury instruments and investors might quit shopping spreads as much and look for stability with GIC investments from carriers capable of offering lower volatility investments for their fixed-income portfolios.

Lamberson Knight and GIC Inc. provide insurance company rate quotations on representative five-year, single deposit, simple-interest, $1 million GICs as follows:

- Aetna Life & Casualty Co., Hartford, Conn.; Dec. 31, no quote; Sept. 30, 9.41%.
- Allstate Life Insurance Cos., Northbrook, Ill.; no quote; 9.71%.
- American United Life Insurance Co., Indianapolis; 8.7%; 9.34%.
- Bankers Life Assurance Co., Des Moines, Iowa; 8.53%; 9.05%.
- Canada Life Assurance Co., Toronto; no quote; 9.85%.
- CNA Insurance Co., Chicago; 8.54%; 9.44%.
- Confederation Life Insurance Co., Toronto; 9.3%; 9.69%.
- Connecticut Mutual Life Insurance Co., Hartford; 8.56%; 9.56%.
- Crown Life Insurance Co., Toronto; 8.77%; 9.71%.
- General American Life Insurance Co., St. Louis; no quote; no quote.
- Great West Life Assurance Co., Denver; 8.59%; 9.61%.
- Hartford Insurance Group, Hartford, Conn.; 8.85%; 9.76%.
- Home Life Insurance Co., New York; 8.64%; 9.56%.
- John Hancock Mutual Life Insurance Co., Boston; 8.53%; 9.43%.
- Life Insurance Co. of Georgia, Atlanta; 8.95%; 9.4%.
- Life Insurance Co. of Virginia, Richmond; 8.48%; 9.53%.
- Massachusetts Mutual Life Insurance Co., Springfield; 8.62%; 9.64%.
- Minnesota Mutual Life Insurance Co., St. Paul; 9.31%; 9.94%.
- Mutual Benefit Life Insurance Co., Newark, N.J.; 8.75%; 9.7%.
- Mutual of New York, New York; 8.54%; 9.56%.
- New England Mutual Life Insurance Co., Boston; 8.66%; 9.51%.
- New York Life Insurance Co., New York; 8.8%; 9.75%.
- Northwestern National Life Insurance Co., Minneapolis; no quote; 9.65%.
- Ohio National Life Insurance Co., Cincinnati; 9.22%; 9.77%.
- Pacific Mutual Life Insurance Co., Newport Beach, Calif.; 8.48%; 9.46%.
- Pan American Life Insurance Co., New Orleans; 8.89%; 9.74%.
- Penn Mutual Life Insurance Co., Philadelphia; 9.12%; 9.87%.
- Phoenix Mutual Life Insurance Co., Hartford, Conn.; 8.94%; 9.74%.
- Provident Mutual Life Insurance Co., Philadelphia; no quote; 9.46%.
- Provident National Assurance Co., Chattanooga, Tenn.; no quote; 9.57%.
- SAFECO Corp., Seattle; no quote; 9.6%.
- Southwestern Life Insurance Co., Dallas; 8.75%; 10.1%.
- State Mutual of America, Worchester, Mass.; 8.65%; 9.6%.
- Union Central Life Insurance Co., Cincinnati; 8.83%; 9.83%.

William M. Mercer-Meidinger-Hansen Asset Planning, Dallas, also surveys insurance companies for rate quotations but does not identify the companies. A summary of various bullet GICs for December is as follows:

- Three year, $1 million, compound: high, 9.17%; low, 7.76%; average, 8.39%.
- Three-year, $1 million, simple: high, 9%; low, 7.64%; average, 8.36%.
- Five-year, $1 million, compound: high, 9.83%; low, 8.03%; average, 8.99%.
- Five-year, $1 million, simple: high, 9.9%; low, 8.01%; average, 8.95%.
- Seven-year, $1 million, compound: high, 10.08%; low, 8.28%; average, 9.34%.
- Seven-year, $1 million, simple: high, 10.23%; low, 8.55%; average, 9.25%.
- Three-year, $5 million, compound: high, 9.02%; low 7.92%; average, 8.46%.
- Three-year, $5 million, simple: high, 8.91%; low, 7.82%; average, 8.4%.
- Five-year, $5 million, compound: high, 9.86%; low, 8.12%; average, 9.05%.
- Five-year, $5 million, simple: high, 9.93%; low, 8.13%; average, 8.99%.
- Seven-year, $5 million, compound: high, 10.1%; low, 8.64%; average, 9.4%.
- Seven-year, $5 million, simple: high, 10.25%; low, 8.64%; average, 9.27%.

Dietrich & Associates, a GIC brokerage firm in Blue Bell, Pa., provided the following rate spread data between a $1 million five-year, simple interest GIC and the average T-bill of the same maturity for the fourth quarter:

- Oct. 7: GIC, 10.12%; T-bill, 9.35%.
- Nov. 9: GIC, 9.05%; T-bill, 8.33%.
- Dec. 9: GIC, 9.28%; T-bill, 8.59%.

The same information for the first three quarters was:

- March 2: GIC, 8.2%; T-bill, 6.79%.
- June 2: GIC, 9.05%, T-bill, 8.19%.
- Sept. 2: GIC, 9.5%, T-bill, 8.59%.

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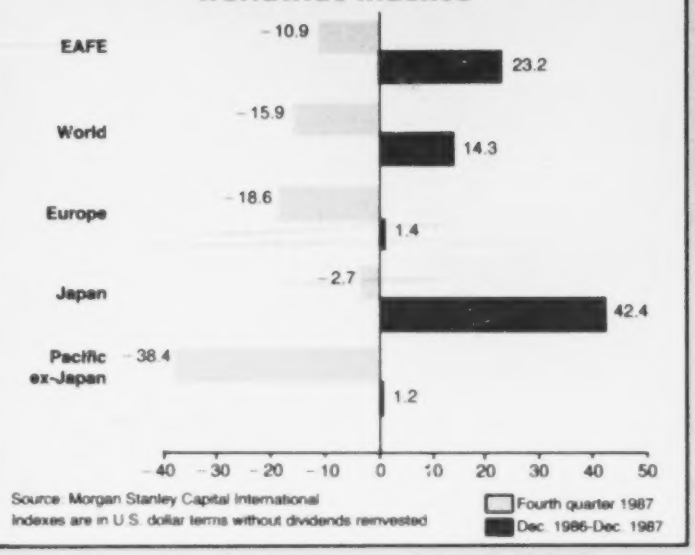
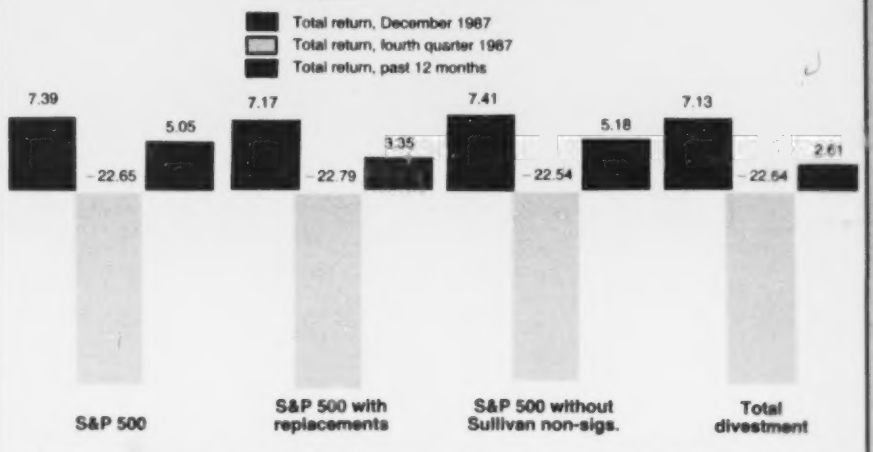
# STATISTICALLY SPEAKING

## Morgan Stanley Capital International worldwide indexes




Source: Morgan Stanley Capital International
Indexes are in U.S. dollar terms without dividends reinvested

## South Africa Free Index




**S&P 500 with replacements:** replaces a South Africa-related company with next largest company in the industry. **S&P 500 without Sullivan non-signatories:** excludes 20 companies, no replacements. **Total divestment:** eliminates all companies with South Africa involvement, no replacements.

Source: Wilshire Associates, Santa Monica, California

## Multiple Markets Index

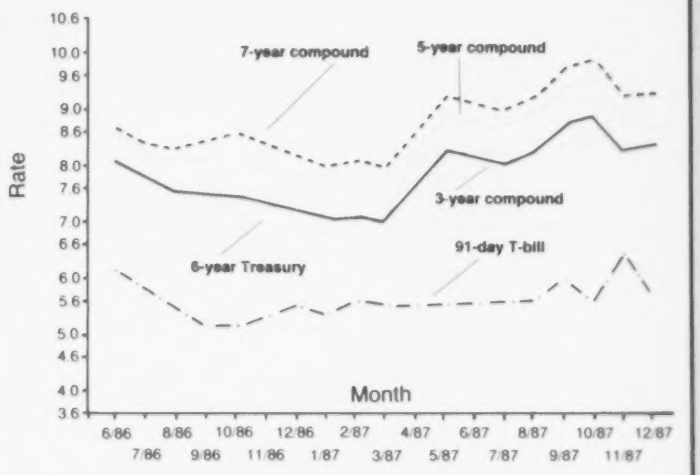
The Multiple Markets Index is a benchmark for total portfolio returns. It is composed of eight asset classes used by retirement plan executives; it is calibrated to reflect the same degree of risk of the typical pension portfolio; it uses passive fixed policy weights; and it represents the individual asset classes by the broadest and most complete market return data available.

| Weights | |
|---|---|
| Large cap stocks | 28% |
| Small cap stocks | 12 |
| International stocks | 15 |
| Venture capital | 5 |
| Domestic bonds | 18 |
| International $ bonds | 2 |
| Non-dollar bonds | 5 |
| Real estate (equity) | 15 |
| T-bills | 0 |
| | 100% |

| | |
|---|---|
| Five-year annualized return | 16.3% |
| One-year return | 9.4% |
| Latest quarter | -8.4% |

Source: First Chicago Investment Advisors, Chicago

## Summary of average bullet GIC data vs. market yields ($1 million contract)




Source: William M. Mercer-Meidinger-Hansen Asset Planning Inc., Dallas

## Fourth quarter 1987 returns

| | Russell 3000® | Russell 1000® | Russell 1000® by market capitalization | | | | Russell 2000® |
|---|---|---|---|---|---|---|---|
| | | | Large | Medium/large | Medium | Medium/small | |
| Technology | -25.6% | -25 % | -24.4% | -25.6% | -23.7% | -28.9% | -31 % |
| Health care | -23.5 | -22.3 | -22.3 | -21 | -19.9 | -29.9 | -34.7 |
| Consumer discretionary | -27.6 | -27 | -27.4 | -28.3 | -25.7 | -25.4 | -31.2 |
| Consumer staples | -21.2 | -21 | -22.7 | -17.7 | -23.3 | -19 | -25.2 |
| Integrated oils | -19.8 | -19.8 | -19.9 | -17.5 | -19.5 | -27.9 | -19.3 |
| Other energy | -26.2 | -25.1 | NA | -24 | -25.4 | -27.1 | -33.8 |
| Materials and processing | -22.6 | -22.3 | -20.4 | -22.6 | -23.9 | -20.8 | -25 |
| Producer durables | -23.1 | -22.2 | -16.5 | -23.4 | -22.2 | -27.2 | -29.5 |
| Auto and transportation | -27.3 | -27 | -23.3 | -29.5 | -25.7 | -30.9 | -31 |
| Financial services | -25.5 | -25.3 | -28.3 | -26.9 | -23.3 | -24.9 | -27.5 |
| Utilities | -11.2 | -11.1 | -15.3 | -4.7 | -8.5 | -11.7 | -11.3 |
| Total | -22.8 | -22.2 | -21.9 | -23 | -21.8 | -23.7 | -29.2 |

Source: Frank Russell Co., Tacoma, Wash.

# Bond assets

*Continued from page 4*
$516 million was indexed. Much of the remainder was in active short-term investment strategies using options or futures, said Carol Kolakowski, manager-marketing support services.

Another of the top 10 with a portion indexed was Mellon Bond Associates, Pittsburgh, which had $165 million of its $1.2 billion in new business indexed.

One of the major active managers among the top 10 large firms was Discount Corp. of New York Advisers, which won nearly $1.6 billion in new bond business. Officials there attributed this to the consistency of their strategy, which shifts maturities based on interest rate anticipation, and continuity of top personnel.

"We do what we say we're going to do," said Barbara Fiorito, vice president and head of marketing. She also noted the firm's two top investment officers — Patricia de Blank Klink, president, and Doug Taylor, senior vice president — have been there since the firm's inception in 1978.

Continuity of top personnel and good returns helped another active firm in the top 10, Fischer, Francis, Trees & Watts Inc., New York, which had $1 billion in new business. Using a various factors to select high-grade bonds, the firm aims to outperform each account's benchmark by at least one percentage point, said John Watts, managing director. "People are increasingly realizing that long-term records of doing that are rare," he said.

Among medium-size managers — those with $250 million to $1 billion in total tax-exempt assets — the top gainer was an indexer, Capstone Asset Management Co., Houston, with $291 million in new bond business, all indexed.

Next was Daniel Breen & Co., Houston, with $225 million. The 4-year-old firm has been known primarily as an equity manager, but is starting to get recognition for its fixed-income management because of performance, said Ed McCullough, senior vice president.

"We have had exceptional performance since the inception of our firm," he said. In the four years ended Dec. 31, the firm's bond accounts had a compound annual return of 15.3%, compared with 13.6% for the Salomon Brothers Broad Investment Grade bond index, he said.

Also, he said, the firm has an easily understandable approach to bonds, focusing on interest rate anticipation and adjusting the portfolio's maturity and duration to match the outlook.

Another firm emphasizing Treasuries was far and away the winner among small firms. Consistent Asset Management Co., Wilmington, Del., founded by a group of former Wilmington Trust Co. professionals, won $150 million in its first full year in business.

Consistent uses quantitative analysis to time the Treasury market, and in doing so has carved itself a niche, said David Umbs, president. It is similar to the approach used when the principals were at Wilmington Trust, but they have come up with some new formulas since they went out on their own, he said. Their track record at the trust company helped bring in business, too, he said. ■

## Most new fixed-income business (net)

### Top 10 managers over $1 billion

| Firm | $ millions |
|---|---|
| Bankers Trust | 3,481 |
| Wells Fargo Investment Advisors | 3,287 |
| Putnam Cos. | 2,387 |
| Discount Corp. of N.Y. | 1,590 |
| State Street Bank and Trust | 1,410 |
| Mellon Bond Associates | 1,245 |
| Pacific Investment Mgmt. | 1,190 |
| Fischer, Francis, Trees & Watts | 1,000 |
| Fiduciary Trust Co. Int'l | 972 |
| Lincoln Capital Mgmt. | 893 |

### Top 10 managers $250 mil. to $1 bil.

| Firm | $ millions |
|---|---|
| Capstone Asset Mgmt. | 291 |
| Daniel Breen | 225 |
| Wolf, Webb, Burk & Campbell | 75 |
| Investment Advisors | 72 |
| Marinvest* | 65 |
| Chelsea Mgmt. | 35 |
| Peters, Gamm & West | 25 |
| First Interstate Bank of Arizona | 13 |
| Citizens Fidelity Bank & Trust | 10 |
| Colorado Capital Advisers | 5 |

* as of Dec. 31

### Top 10 managers under $250 million

| Firm | $ millions |
|---|---|
| Consistent Asset Mgmt. | 150 |
| Marathon Asset Mgmt. | 11 |
| Gateway Investment Advisers | 6 |
| Heartland Capital Mgmt. | 5 |
| Qualified Counseling | 3 |
| First Commerce Investors | 2 |
| Glass, Austin & Calvert | 2 |
| JMC Capital Mgmt. | 2 |
| NM Capital Mgmt.* | 2 |
| Republic Nat'l Bank of N.Y. | 2 |

* as of Dec. 31

# Passive style

*Continued from page 4*
respondents reported $48.5 billion in new equity business, with 60.8% indexed, and $24.3 billion in new bond business, with 24.3% indexed. International managers reported $4.9 billion in new international equity business during 1986.

An indication of the continued popularity of international investing is the presence of international managers among those with the most net growth in their respective size categories.

Among medium-size managers — those with $250 million to $1 billion under management — the top 10 net gainers included four international or global managers: Oechsle International Advisors, Boston, with a net gain of $299 million; Julius Baer Investment Management Inc., New York, with $269 million; Posthorn Global Asset Management, London, with $260 million; and Beutel, Goodman International PLC, London, with $251 million.

Among small managers — those with less than $250 million under management — international representatives in the top 10 were Boston International Advisors, with $144 million in net growth, and SBC Portfolio Management International Inc., New York, with $85 million.

New real estate business among managers surveyed hit $10.9 billion, a substantial increase from the $6.9 billion reported a year ago. This was due to several factors, including maintaining target allocations and participation in large and direct deals.

There were two real estate specialists among the top 10 large managers — those with more than $1 billion under management — for net growth: JMB Institutional Realty Corp., Chicago, with $4.4 billion, and Copley Real Estate Advisors, Boston, with $3.3 billion.

GICs accounted for $21.8 billion of new business, up from $17.2 billion during 1986; GIC managers said they expect continued growth, especially from defined contribution plans.

Two of the top 10 large firms for net growth benefited greatly from GIC investments. Travelers Cos., Hartford, Conn., with net growth of $5.2 billion, had $2.7 billion of this in GICs. Prudential Asset Management Group, Newark, N.J., with net growth of $3.8 billion, had nearly $4.6 billion in GICs.

Also, the biggest net gainer, Bankers Trust Co. — Investment Management Group, New York, with $13.3 billion in net growth, had $960 million flow into its managed GIC fund during the first 11 months of 1987. The fund was started late in 1986.

Portfolio insurance attracted $5.8 billion in new business, less than half of the $12.7 billion it gained during 1986.

Since the October market plunge, when many portfolio insurance programs failed to provide the promised level of protection, numerous pension funds have stopped using the strategy. The Scorecard figures for individual asset classes, however, do not reflect withdrawals. ■

## Most new balanced business (net)

### Top 10 managers over $1 billion

| Firm | $ millions |
|---|---|
| Wells Fargo Investment Advisors | 1,384 |
| Mellon Capital Mgmt. | 1,250 |
| Manufacturers Nat'l Bank of Detroit | 1,232 |
| Boston Co. | 452 |
| IDS Equity/Fixed-Income Advisors | 400 |
| TSA Capital Mgmt. | 359 |
| Lazard Freres Asset Mgmt. | 322 |
| Oppenheimer Capital | 309 |
| Northern Investment Mgmt. | 277 |
| Prudential Asset Mgmt. | 270 |

### Top 10 managers $250 mil. to $1 bil.

| Firm | $ millions |
|---|---|
| United States Trust | 132 |
| Wolf, Webb, Burk & Campbell | 125 |
| Daniel Breen | 111 |
| Morison Asset Mgmt. | 105 |
| Keystone Investment Mgmt. | 85 |
| Tom Johnson Investment Mgmt. | 80 |
| Hahn Holland & Grossman | 60 |
| First Interstate Bank of Washington | 56 |
| Wood, Struthers & Winthrop | 54 |
| Columbus Circle Investors | 36 |

### Top 10 managers under $250 million

| Firm | $ millions |
|---|---|
| Scudder, Stevens & Clark | 141 |
| Palley-Needelman Asset Mgmt. | 51 |
| Hallmark Capital Mgmt. | 37 |
| Republic Nat'l Bank of N.Y. | 35 |
| American Asset Mgmt. | 29 |
| James River Capital Mgmt. | 29 |
| Chicago Group - Morgan Stanley Asset Mgmt. | 27 |
| NCM Capital Mgmt. Group | 20 |
| Cramer Rosenthal McGlynn | 18 |
| NM Capital Mgmt.* | 17 |

* as of Dec. 31

# Equity basics

*Continued from page 4*
performance records.

Such a record helped Sun Banks Investment Management Group, Orlando, Fla., place sixth among large firms in new equity business, with nearly $1.1 billion.

"People really cannot ignore our record," said Anthony R. Gray, president. "Whether it's one, three, five or 10 years, it's up in the first or second percentile."

In the Pensions & Investments' Performance Evaluation Report for periods ended Dec. 31, Sun Banks' commingled equity fund topped the Standard & Poor's 500 index and ranked in the top percentile for the one-, three-, five- and 10-year periods, with returns of 16.3%; a compound annual 31.4%; a compound annual 28.4%; and a compound annual 22.1%, respectively. In three of those periods, Sun Banks' portfolio was the leading fund.

Seventh among large firms was a quantitative and relatively new firm, Rosenberg Institutional Equity Management, Orinda, Calif., with $1.06 billion in new equity business.

Several managers using quantitative techniques were among the top midsize and small firms; the quants included Renaissance Investment Management Inc., Cincinnati; Disciplined Investment Advisors Inc., Evanston, Ill.; Eagle Asset Management Inc., St. Petersburg, Fla.; WEDGE Capital Management, Charlotte, N.C.; and Aronson & Fogler, Philadelphia.

The leading gainer of equity assets among those managing $250 million to $1 billion was one combining quantitative and fundamental analysis. Columbus Circle Investors Corp., New York, won $328 million in new equity business.

The firm uses its analysis to find industries and stocks performing beyond expectations, said Win Headley, vice president. The firm's goal is to outperform the S&P 500 by at least 200 basis points a year; during 1987, the firm's equity composite returned 9.8% to the S&P 500's 5.2%.

Ranking second among midsize firms was an indexer, Capstone Asset Management Co., Houston, with $324 million in new equity business. A group of principals of Tenneco Financial Services bought the subsidiary from Tenneco Inc. to set up Capstone; they took some of the parent company's pension assets with them to manage.

Despite all the interest in indexed and quantitative strategies, the top gainer among small firms was a highly fundamental manager, Ariel Capital Management Inc., Chicago, which emphasizes high-quality, undervalued companies that have been misunderstood or ignored by the market. Ariel brought in $118 million in new assets — so much that it cut off marketing efforts. ■

# LTV pension

*Continued from page 1*
provided to the committee of unsecured creditors in LTV's bankruptcy action indicating LTV could support the plans if restored. LTV has committed to making contributions of more than $90 million annually to fund the follow-on defined contribution plan. (*Pensions & Investment Age*, Sept. 21.)

"These contributions obviously could be used instead to satisfy minimum funding obligations under the restored plans," the PBGC claims in its motion. "Assuming that they would be so used and that LTV Steel obtained funding waivers for the restored plans for the 1984-'86 plan years, the total prospective annual cost of funding the restored plans would be approximately $260 million.

"Thus, the incremental effect of full restoration, based on company figures regarding the cost of the follow-on plans, is $170 million. The PBGC believes that the effect may be even less." The total could be less than $120 million, according to the motion.

A PBGC official said LTV's current commitment to its defined contribution plan, included in a collective bargaining agreement with the United Steelworkers Union, is nearly $200 million.

The wording in the PBGC motion and comments made by PBGC and LTV representatives aren't likely to ease the tensions over the deepening legal and financial quagmire regarding the disposition of LTV's pension plans following the company's bankruptcy filing.

The opening paragraph of the filing claims LTV "promised its workers pensions, but it did not pay for them," and accuses the company of lacking concern for its retirees and using the federal pension insurance program to provide LTV with a competitive advantage by unloading its pension liabilities.

LTV's steel division has shown improved cash flow, sales, earnings and net and operating income and decreases in operating costs and expenses through the first six months of 1987. Not cited in the motion was third-quarter operating income from LTV's steel operations that amounted to $82.7 million, up $56 million from the same period in 1986. LTV's steel division is expected to post an operating profit for the fourth quarter of 1987.

Royal Dellinger, deputy PBGC director, said the filing points out LTV is using the federal pension insurance program "to take unfair advantage of other steelmakers" and if LTV succeeds in dumping its nearly $2 billion in pension liabilities on the PBGC, other steelmakers would consider similar steps to stay competitive.

"The pension insurance program was not established to provide interim financing or bailouts to employers like LTV Steel or to assist such employers to gain a competitive edge in their industries. Pension plans therefore may not be sacrificed first in bankruptcy solely to ease a reorganization or to assure 100% recovery to commercial and other creditors," according to the petition.

"Declaring restoration illegal in this case could mean, in practice, that the PBGC could never restore the pension plan of a Chapter 11 debtor, even though the debtor was operating successfully and providing ongoing benefits for its employees . . . it could become routine for employers to file for bankruptcy primarily to escape their pension benefit obligations."

A PBGC spokeswoman said the agency is seeking summary judgment because "the PBGC believes there are no material facts in dispute. . . . Also, it is a way to get a quick resolution of the lawsuit so retires will know what their entitlements are."

LTV attorney Frank Cummings said he is "distressed" by the tone of the filing as well as its content.

"They are saying 'there aren't any issues of fact and you should award us a victory.' . . . They not only said there aren't any issues of fact but that no one is entitled to discover if there are any facts. Is this agency of government so above the law that it can do whatever it pleases? If you boil it all down, what they are saying is that if they decide to do it, it must be legal," Mr. Cummings said.

"They say 'we did it and that makes it lawful,' the king can do no wrong. I respond to that by saying if the king doesn't obey the law there is no law. This case really raises that issue, whether the king can do no wrong. They simply threw the law back into the employer's face. They believe they can ride roughshod over everyone."

Mr. Cummings said the federal bankruptcy code "prevents anyone from bringing any action and taking property from the bankruptcy estate. The bankruptcy code says if you have a claim, make it. They (PBGC) have attempted an end run and are attempting to advance their financial position outside the bankruptcy court," he said.

LTV has until Feb. 22 to respond to the PBGC motion. ■

# Issuers turn

*Continued from page 3*
spurred insurance companies and other private placement market players to compete more strongly.

Braderick Harper, supervisor-financial planning at American Information Technologies Corp., Chicago, said: "We do private placements to some degree. I am interested in it as a financing vehicle."

In recent years, the private placement market experienced sometimes wrenching changes that resulted in a shrinkage of total privately placed volume.

Private market dealmakers witnessed keen competition for the traditional private placement product — straight debt financing — especially from the public junk market and products like medium-term notes.

The advent of shelf registration also hurt the private market; no longer were private placements the only means of doing a deal quickly and relatively less costly.

The effects of junk bonds and shelf registration on "private financing have been revolutionary, changing in a short period of time both the preferences of investors and the types of deals which get done as private placements," said David C. Sauvage, senior vice president and co-head of private placements at Shearson Lehman Hutton Inc.

While investment bankers acknowledge these products did cut into their market, Mr. Sauvage said they also have had some beneficial effects — "a certain credibility to the whole idea of investing in lesser credits."

During the past two to three years, private buyers willing to assume more risk started scouting for new investments that could generate the hefty returns they wanted. These investors set their sights on what John D. Miller, executive vice president at Equitable Capital Management Corp., New York, which has invested in excess of $10 billion in private placements, calls "enhanced return investments" such as leveraged buy-outs and corporate restructurings. He noted private investors have been lining up to get pieces of these deals.

"It's sure competitive" among buyers, said James Gleaves, vice president, American General Corp., Houston, whose private placement investments grew to more than $570 million from nothing three years ago. "We're seeing more pension funds in LBOs, and the Japanese are very aggressive. We are increasing our participation. And we'll be emphasizing it even more."

**The private placement boom***

| Year | No. of issues | Amount ($ bils.) |
|---|---|---|
| 1982 | 1,171 | 24.3 |
| 1983 | 1,596 | 35.6 |
| 1984 | 1,789 | 53.3 |
| 1985 | 2,240 | 73.1 |
| 1986 | 2,648 | 1,234.0 |
| 1987** | 1,233 | 58.4 |

*Private placement data include all private debt, equity and preferred offerings as well as mortgage-related investments.
**Through June 30
Source: IDD Information Services Inc.

Nathaniel Coolidge, senior vice president at John Hancock Mutual Life Insurance Co., Boston, said Hancock, which manages about $10 billion in assets, has 20 different portfolios full of private placement investments, all with different aims. "Some take bite-size deals, others take big bites. We have expanded our parameters to look at everything from AAA to B to senior debt to private equity, maturities as short as one year to as long as 25 years and invest $1 million to $100 million," he said.

Robert Morris, vice president and general manager, General Electric Investment Corp., which manages General Electric Co.'s $27.3 billion pension fund, noted GEIC's $1.4 billion portfolio of equity-linked private placements has "gone into riskier areas like mezzanine (financing) and equity layers of deals."

Merrill Lynch's Mr. Greene said the Japanese also have proven important competitors for traditional private buyers. "They've been buyers of everything from the mezzanine portion of leveraged buy-outs to the debt portion of leveraged leases. They have been very aggressive in their pricing and have tended to snap entire very attractive deals away from domestic buyers," he said.

To attract new issuers and respond to changing investor demands, private placement professionals have moved rapidly to replace their traditional private placement deal flow with a proliferation of "new age" investment vehicles. They include leveraged buy-outs and leveraged buy-out fund investments, as well as straight equity deals and debt with equity kickers.

"The market for private equity is expanding, said Scott Katzmann, vice president, First Boston Corp., New York. "We've done lots of private equity deals. And larger private equity placements are becoming more commonplace."

Other attractive private placement investments include real estate financing, project financing, and special purpose funds such as Lazard Freres & Co.'s white knight fund or Trust Co. of the West's equity kicker fund.

Investment bankers also are loosening covenants and trying to simplify the structures of private placements to make them more like public market transactions.

Since Oct. 19, private placement professionals say they have received hundreds of telephone calls from companies. Many have never tried the private market before, so the private placement specialists are trying to capitalize on the dearth of public equity offerings and limited opportunities in the public debt market.

## LATE NEWS

*Continued from page 2*
$94,023 this year, up from $90,000, and employees will be able to defer a maximum of $7,313 into their 401(k) plans, up from $7,000, the Internal Revenue Service announced late last week.

### *Late money movers*

● NEW YORK — The $1.4 billion ITT Corp. pension fund has increased allocations to equity accounts managed by American Fund Advisors and GAMCO Investors Inc. and dropped Fred Alger Management Inc., according to Edwin J. Ehrlich, director of pension fund trusts.

He would not disclose the amount of the shift. All three firms are based in New York.

● LOUISVILLE, Ky. — The $35 million Louisville Policemen's Retirement Fund hired three investment managers, dropped two and reduced the allocation to a third, said William T. Crossfield, fund administrator.

Each manager hired received about $5 million. They are: Todd Investment Advisors Inc., Louisville, Ky., for fixed income; Schaenen Wood & Associates Inc., New York, equity; and Killian Asset Management Corp., Barrington, Ill., fixed income.

Released were Investment and Capital Management Corp., Rolling Meadows, Ill., which had run an $8.7 million fixed-income portfolio, and First Kentucky Trust Co., Louisville, which had managed a $2 million balanced portfolio. About $4 million was taken from Stock Yards Bank & Trust Co., Louisville, which still runs $19.6 million for the fund. Mr. Crossfield said the changes were made for style reasons.

# N.Y. strategy

*Continued from page 3*
cisco, said the strategy focuses "on the major capabilities" of its managers and could avoid confusion of several managers scouting for the same properties.

He added, however, that using one manager per property type requires more time to find properties and could cost the fund the investment diversification several managers would provide.

"There's nothing incorrect in doing it this way, but we prefer our clients to have a more diversified manager group," said Paul Saylor, principal of Institutional Property Consultants Inc., Atlanta. He said Ellis and TCW are good choices for their respective property types, "but maybe more than two managers will be needed to generate the kind of of deals needed to get this much money deployed."

The investments are part of a five-year plan to increase New York's equity real estate portfolio to $2.1 billion or 6% of total assets from the fund's current allocation of less than 1%.

William Ramseyer, president of Pension Realty Advisors, San Francisco, the fund's consultant, said his office recommended Ellis and TCW because of their expertise in the respective property types.

But others criticized the New York fund officials' decision to select managers for specific property types in direct investing.

"My feeling is you're better served with several managers because you increase your chances of finding" property, said Peter Jeans, real estate investment officer for the $9.2 billion Alaska Permanent Fund Corp., Juneau. The Permanent Fund has $450 million in real estate, of which about 50% is in direct ownership.

A public fund real estate officer, who asked not to be identified, said he wonders if just one manager can find all the acquisitions needed within one property type in today's tight institutional-grade property market.

Mr. Ramseyer said hiring managers based on property specification "creates more focus" in the acquisition stage than having money divided among several managers each competing for the same property type.

Ellis has about 80% of its $1.4 billion in tax-exempt assets invested in offices and retail; TCW had about 46% of its $1.4 billion of tax-exempt assets invested in industrial as of June 30.

The commitments to Ellis and, possibly, TCW will come from the $1.4 billion allocated to direct investing. The remaining $700 million of the $2.1 billion target allocation will be invested in commingled funds.

Mr. Ramseyer said management fees charged to the New York fund will be less than usual by hiring managers of specific property types, but declined to be more specific. ■

Photo by John Ken...

**Robert Steves says the fund chose the strategy to avoid overlapping and inefficiencies.**

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PENSIONS & February 22, 1988

Investment Age

The newspaper of corporate and institutional investing $4.50 an issue · $90 a year

# Proxy guidelines aired

## Ultimate stock value is key

By Nicky Robertshaw

WASHINGTON — The ultimate economic value of the stock must be the primary consideration when fiduciaries vote their proxies, a key Labor Department official has decreed.

The long-awaited stance on how institutional shareholders must vote proxies to meet their fiduciary obligations under the Employee Retirement Income Security Act will be explained in more detail in a letter to a company whose proxy-voting procedures have been under investigation by the Department of Labor. The letter is expected to be released this week, said David M. Walker, assistant secretary of labor.

Mr. Walker, who referred to the letter during a meeting of the United Shareholders Association in Washington, would not name the company, but sources said Mobil Oil Corp., New York, which allegedly placed undue pressure on Citicorp Investment Management Inc., New York, in voting proxies, and Avon Products Inc., New York, both are under investigation by the Labor Department.

In an interview, Mr. Walker said the letter will involve two key policy points:

- It will reinforce the importance of voting with the ultimate economic value of the stock as a priority — even if it conflicts with the interests of management, labor or a short-term premium per share available through a tender offer.

Fiduciaries voting proxies must make an independent analysis of the situation, and must be able to document the vote and the reasons for the decision, he said.

- It will clarify the Labor Department's position that named fiduciaries who farm out investment management decisions but retain proxy voting power still are liable for ERISA violations resulting from those proxy votes. That separation of voting rights from investment decisions also must be spelled out in plan documents, Mr. Walker said.

When an investment manager votes a proxy, he or she must ignore any pressure or direction from executives of the plan sponsor, he added.

"The department's statement will help put a stop to the kinds of pressures corporate managements have applied to independent investment managers, but to make this policy credible, the department will have to

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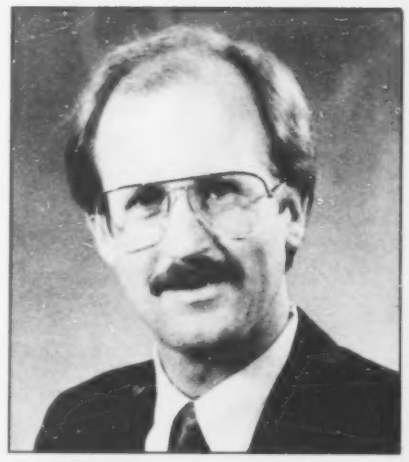

**David Walker says the Department of Labor's letter on fiduciaries' voting of proxies sets two key policy points.**

# Banks expand financing role ...

By Marcia Parker

More corporate financial executives are listening when commercial bankers talk about the investment banking services they can deliver.

Chrysler Corp., Ogden Corp., Avon Corp., Armco Inc. and Mack Truck are among the companies that have accepted the concept of commercial bankers providing investment banking services.

The bankers, for their part, are trying to build on the toehold they've established in the investment banking business and compete head-to-head with their Wall Street counterparts.

"The franchise that Wall Street has is still intact, but not for long," said Frederick W. Zuckerman, vice president and treasurer at Chrysler, Highland Park, Mich. "I do not perceive the commercial banks are yet in the big leagues, but in three to five years they will be."

Corporate finance chiefs at many companies say that while commercial banks have a long way to go — and their progress largely depends on whether regulatory shackles are released — several banks have made significant inroads into the investment banking business, serving as private placement agents for securities and, to a lesser extent, advisers on mergers, acquisitions and divestitures. Those banks include Bankers Trust Co., J.P. Morgan & Co., Citicorp and Chase Manhattan Bank, all in New York.

***Pensions & Investment Age*'s special look at commercial bankers' inroads into investment banking continues in Financing — Page 35.**

Not withstanding the regulatory barriers and the uncertain outlook for future regulation, corporate financial executives say more commercial bankers are offering innovative ideas well tailored to the corporations' financing needs.

Financial officers have no plans to abandon their investment bankers, but several companies have either begun to use commercial banks to handle more than just their borrowing needs or are thinking about it, although most still rely on investment bankers for advice on mergers and acquisitions and sizable deals.

"We see a lot more of the banks in here," said Maria Monet, chief financial officer at Ogden, New York. "In the past year I've seen a much more aggressive push. The banks are coming in with ideas based on their familiarity from the lending side that are much more targeted to-

*Continued on page 49*

**Bankers Trust Co., New York, left, is among commercial banks increasing their presence — and gaining acceptance — in the investment banking field. How fast Bankers and others will develop additional services depends largely on whether governmental prohibitions will be**

# ... as laws are eased

By Brad Rudin

Some commercial banks are poised to attempt to take underwriting business from their Wall Street rivals March 1, but others, concerned about restrictions on their new powers, are taking a go-slow approach.

The congressionally imposed moratorium on expanded securities powers for banks expires next month, and a federal appeals court decision this month pierced a gaping hole in the legal wall dividing investment and commercial banking.

The combination of the two means commercial banks will get the expanded underwriting powers granted to them by the Federal Reserve Board in April and May 1987.

Banks had been unable to use those powers pending a suit by the Securities Industry Association against the Fed.

The 2nd U.S. Circuit Court of Appeals Feb. 8 upheld the Fed's grant of expanded underwriting powers to seven money center commercial banks.

Commercial bankers at the big money center institutions say they have the resources to pose a serious competitive threat to investment bankers.

But expanded securities powers could have little practical effect, said Richard H. Jenrette, chairman of Donaldson, Lufkin & Jenrette Securities Corp. and the Equitable Life Assurance Society of the United States, the parent of the securities unit.

Mr. Jenrette believes capital constraints likely would inhibit the ability of many banks to make a major move.

The planned or completed sale of several bank money management units suggests commercial banks might not be willing to make a big commitment to the securities industry, he said.

*Continued on page 51*

## LATE NEWS

### Fund adds foreign stock, realty

RESEARCH TRIANGLE PARK, N.C. — Burroughs Wellcome Co., the pharmaceutical manufacturer, has restructured its $220 million in pension investments to include non-U.S. equities and real estate allocations.

The revamped asset program should take effect some time in March, when all contracts are signed and terminated portfolios are liquidated, said Glenn Andrews, assistant vice president-finance.

The new asset mix shows a slight increase in domestic equities, less in domestic fixed income, and no cash category, although individual managers have latitude in holding cash.

The new mix is 58% domestic equities; 10% non-U.S. equities; 12% real estate; and 20% domestic fixed income. As of Dec. 31, the asset mix was 56% equities, 26% fixed-income; and 18% cash.

The additions of international and real estate resulted from "some capital market assumptions we made . . . using expected returns from (the Morgan Stanley Capital International Europe Australia Far East index) and real estate markets," Mr. Andrews said. "They seemed to provide an improved risk/return profile for our portfolio."

Bankers Trust Co. — Investment Management Group, New York, was hired to manage non-U.S. equities and The Phoenix, Hartford, Conn., will manage the real estate investments. Thompson, Siegel & Walmsley Inc., Richmond, Va.; Frontier Capital Management, Boston; and Tweedy, Browne Inc., New York, will continue to manage domestic equities. Criterion Group, Houston, will continue as the fixed-income manager.

One manager was terminated, but Mr. Andrews would not name the firm. According to the 1988 Money Market Directory of Pension Funds, the fourth equity manager was Spears, Benzak, Solomon and Farrell Inc., New York. Executives of the firm did not return phone calls by press time.

Callan Associates Inc. offices in San Francisco and Atlanta ran the asset/liability models, manager performance evaluations and manager optimization.

### Super Valu picks master trustee

MINNEAPOLIS — Super Valu Stores Inc. has hired Bankers Trust Co., New York, as master trustee for retirement plans with total assets of $80 million, said Gloria Werner, benefits manager.

The bank replaces First Bank Minneapolis. The company became dissatisfied with First Bank after it had shifted its trust department to St. Paul without notice, Ms. Werner said.

Bankers Trust will provide master trustee services for the Super Valu Stores Inc. Retirement Plan and Pretax Savings and Profit Sharing Plan, and the respective profit-sharing plans of Super Valu Stores' retail division, which include Lewis Grocer, Ryans Division and Charley Brothers.

### New Orleans teachers taps NCM

NEW ORLEANS — The United Teachers of New Orleans has hired NCM Capital Management Group, Durham, N.C., to manage the union's $8.5 million health and welfare trust fund in a fixed-income account, according to Fred Moore, fund coordinator.

Mr. Moore said the Taft-Hartley fund was established to provide supplemental benefits for New Orleans public school employees. The assets had been managed internally before NCM was retained on a two-year contract, said Mr. Moore.

NCM was hired after interviews with eight investment firms, he said. The search was conducted internally.

## HIGHLIGHTS

### SEC scrutinizes futures — P. 33

The Securities and Exchange Commission has issued its own report on the October market drop, and zeroes in on stock-index futures and other futures-related trading strategies. The SEC report, while saying that no single factor caused the crash, did not absolve futures-based trading strategies, believing the strategies "were a significant factor in accelerating and exacerbating" the October market free fall.

## DEPARTMENTS


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Vol. 16, No. 4 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1988.

### Manager questionnaires now out

Questionnaires for *Pensions & Investment Age*'s annual issue profiling the nation's institutional money managers have been mailed out. For your firm to be profiled in the May 23 directory, please return the questionnaire by Feb. 26 to Christine Philip, directory coordinator, *Pensions & Investment Age*, 740 N. Rush St., Chicago, Ill. 60611-2590.

If you have any questions, or have not received a questionnaire, please contact Ms. Philip at (312) 649-5217.

# Boston Co. axes oil and gas group

By Fred Williams

BOSTON — The Boston Co. has phased out its energy investment group, considered one of the leading pension fund oil and gas investment managers.

"Energy Advisors got off to a good start," said Robert Mainer, senior vice president at the Boston Co. who oversaw the dissolving of the unit. "But due to the vicissitudes of the energy business and some uncertainty by pension plan sponsors about oil and gas . . . (it) never really got off the ground, assets under management never became significant and it quickly became apparent it was not in the mainstream of Boston Co.'s area of business."

Doug Suliman, president of Boston Co. Energy Advisors since 1985, resigned in September and the next month joined First Reserve Corp., Greenwich, Conn., one of Boston Co.'s competitors. He is serving as a consultant to Boston Co. to ease the transfer of assets to other investment firms. Most of the remaining staff members have been transferred to other positions in Boston Co.'s banking operation.

Boston Co. Energy Advisors was formed in 1981 and, at its peak in 1985, had about $100 million under management. When the decision was made early last year to phase out the division, it had between $40 million and $50 million under management from five clients, Mr. Suliman said.

"When they approached me with the idea that they were getting out of the business, I could appreciate the decision," he said. "This is a boutique investment and didn't fit well with a large corporate environment. It was easy for me to see it was a non-strategic investment area for them. I wanted to continue in the business in some form and talked to a dozen or so prospective successors and settled on First Reserve."

Boston Co. Energy's investments were designed to generate

*Continued on page 45*

**Advo Systems, whose warehouse is shown above, is one small-capitalization holding of The LTV Corp. Despite recent gains, pension funds are not jumping on the small-cap bandwagon.**

# Small-cap 'rebound' doubted

By Fred Williams

Small-capitalization stocks, outperforming the market since Jan. 1, might be poised for a rebound after five years of lackluster performance, but interest on the part of pension plan executives isn't.

Some investment consultants have noticed increased interest in small-cap investment managers, while others say pension officials are growing more cautious about the equity market and are raising cash or investing in fixed-income instruments.

Through mid-February the NASDAQ composite index and the Russell 2000, two measures of small-capitalization stock performance, were up 5.7% and 7.3% respectively, while the Dow Jones industrial average was up only 1.6% and the Standard & Poor's 500 stock index was up 3.6%.

Investment strategists at investment management firms have started calling attention to the small-cap sector, believing it to be undervalued and ready for a strong year.

"Our sector has significantly underperformed relative to large-capitalization stocks, but that is changing," said Robert Kern, executive vice president of Morgan Grenfell Capital Management Inc., New York, and leader of the Morgan Grenfell small-cap equities team. "Pension plan sponsors are looking at their asset allocation models and concluding the small-cap sector is attractive now. They are at historic valuations, lows we haven't seen since the early 1960s."

Morgan Grenfell's definition of small-cap covers any company with less than $500 million in market capitalization, but the firm focuses on companies between $50 million and $500 million, of which there are about 2,000 publicly traded issues.

Morgan Grenfell holds substantial positions in such small-cap issues as **J.M. Smucker Co.**, **Intermec Inc.**, **Electromagnetic Sciences Inc.** and

*Continued on page 44*

# No boundaries

## Venture capitalists look overseas

By Trudy Ring

Venture capital investments with an international flavor are attracting U.S. investors, but some questions remain.

Among the investors are the Cincinnati Bell Inc. and United Technologies Corp. pension funds, the Rockefeller Foundation, the Yale University endowment fund and, on behalf of clients, such money management firms as Alliance Capital Management Corp., Abbott Capital Management Inc. and Aetna Life & Casualty Co.

Although concerns over currency fluctuations, track records, public markets and communication make institutions hesitant to invest in foreign ventures, they are providing capital to young U.S. companies with foreign ties.

Hambro International Venture Fund Management Services Co.,

*Continued on page 46*

**Telematics Inc., a computer firm, is one international firm weaned on venture capital that now is a public company.**

Wiley

Philip

Photos by Michael Marcotte

## P&I changes staff duties

*Pensions & Investment Age* has made several staff changes.

In Chicago, Carol Wiley, formerly directory coordinator, has been named staff reporter. Christine Philip has been hired to assume Ms. Wiley's duties.

In New York, Bureau Chief Joel Chernoff has been named senior editor and Brad Rudin, formerly a staff reporter, has been named senior reporter.

Ms. Wiley joined *P&I Age* in March 1986. She previously had been a reporter for the Chicago Tribune and several other daily newspapers in Illinois, and worked as an organizer and publicity writer for a community college and several non-profit organizations.

Ms. Philip worked in London for seven years, serving as client services coordinator for the Yankee Group, a telecommunications/computer research analysis firm.

Since returning to the United States, she has worked with Fortune 100 and 500 clients providing proprietary market research studies and information services.

Ms. Philip received her bachelor's degree in English literature and creative writing from Knox College and the University of Durham, England. She has done graduate-level work at Pennsylvania State University.

The changes in the New York staff reflecting the publication's expanded commitment to international investment and corporate finance coverage.

Mr. Chernoff will develop and oversee a network of foreign-based correspondents, as well as report on international and domestic developments affecting U.S. and foreign institutional investors. He joined the publication in May 1982.

Mr. Rudin, who joined *P&I Age* in May 1986, covers corporate finance with Associate Editor Marcia Parker. Before joining the publication, he covered local government for newspapers in New Jersey. ■

### CORRECTIONS & CLARIFICATIONS

- **American Fund Advisors Inc.** was omitted inadvertently from the list of equity managers in a profile of ITT Corp.'s employee benefit assets Jan. 25. The firm has been managing a portion of ITT's equities since March 1.
- **Unisys Corp.**'s defined benefit assets after the October market drop totaled $2.561 billion, a drop of 15.7% from the assets as of Sept. 30. It was incorrectly reported Jan. 25 that the drop represented total employee benefit assets.
- **Amivest Capital Management** manages equities for the **IAM National Pension Fund**. The firm was identified incorrectly in the Jan. 25 issue.
- The South Africa-free index of **Statistically Speaking** in the Feb. 8 issue contained an error in the Standard & Poor's 500 number. The year-end figure is 5.23%.

# Bransford back in consulting

By Joel Chernoff

ATLANTA — Roger Bransford is back in the investment management consulting business — again.

One of the best-known consultants in the business, Mr. Bransford has joined Towers, Perrin, Forster & Crosby Inc. to head its investment consulting operation. He left D.L. Eager Associates Inc., a Louisville, Ky.-based firm that advises money managers on how to market their products.

"The plan is to have a business which is going to focus on TPF&C clientele," said Mr. Bransford, who has the title of national manager-asset consulting and will be based in Atlanta.

The hiring of Mr. Bransford signals a new push into the investment consulting business for TPF&C, where the firm has lagged some of its major competitors. "We were inching into asset modeling and decided to go all the way," said Don Sullivan, vice president and director in TPF&C's New York office.

The firm was conducting asset/liability studies for clients but was unable to meet customer demands to perform manager selection and evaluation works, he explained.

TPF&C already has an infant investment consulting practice in place, but Mr. Bransford is expected to expand the business substantially.

Last fall the firm snared a consulting contract with the $525 million City of Memphis, Tenn., retirement system away from E.F. Hutton Consulting Group.

Tom Harrison, manager of debt and investments for the Memphis fund, said fund officials were impressed with TPF&C's asset allocation tools.

TPF&C now has only one full-time consultant, John Sweeney in Atlanta, a few consultants available part time and about six systems people.

The firm won't necessarily build up its data base of investment manager performance from scratch, but might look at subcontracting existing data bases where appropriate, he said.

Also, TPF&C likely will not train specialists for every asset class, but might contract with a real estate consultant, for example.

Mr. Bransford has been in and out of the investment management consulting field lately, but spent nearly 15 of the past 17 years in the business.

From 1971 through 1978, he was at the old A.G. Becker & Co. consulting business, leaving to join Meidinger Inc. as senior vice president and member of the board of directors.

Shortly after Meidinger was merged into William M. Mercer Inc. in early 1984, he left to become president of Little Rock, Ark.-based Meridian Management Co. for a year.

He then returned to Mercer-Meidinger in June 1985 to oversee the asset planning business. But he left the firm again in November 1986, this time to join Dave Eager, another former head of the Mercer asset planning unit. ■


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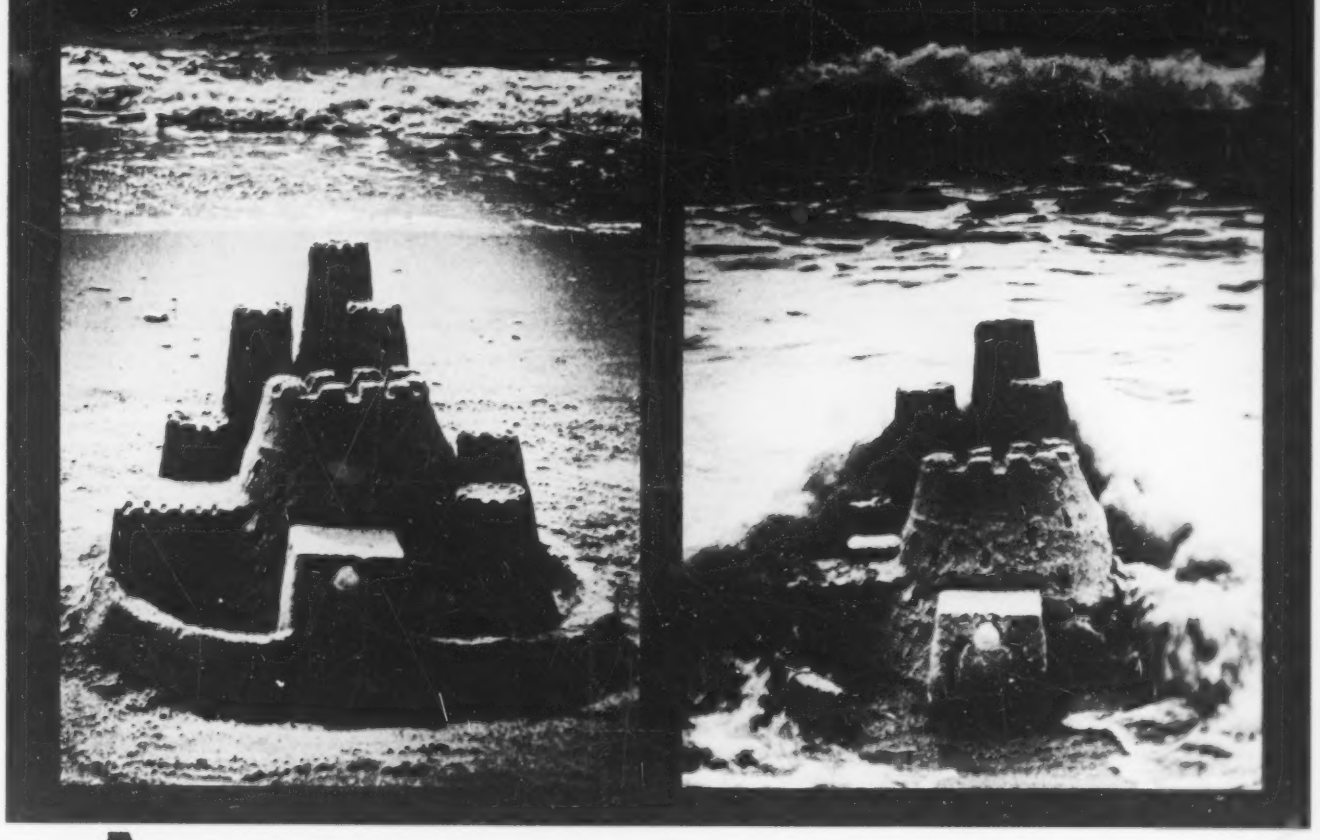

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# Few dodge '87 perils

## Market crash, loan losses cause red ink

By Marcia Parker
and Brad Rudin

NEW YORK -- J.P. Morgan & Co. Inc. and Morgan Stanley Group Inc. outpaced their rivals in commercial and investment banking with 1987 financial statements that showed few scars from the difficult year.

Money center commercial banks sustained poor results because of the large provisions for loan losses that were taken in response to the Third World debt crisis. The investment banking industry experienced setbacks in trading, underwriting volume and mergers and acquisition activity as a result of the Oct. 19 stock market plunge.

Although J.P. Morgan's net income fell, it posted a better bottom line than other New York-based money center banks, which sustained deep losses in 1987.

Morgan Stanley, a bulge-bracket investment bank, was the only publicly traded securities firm to generate higher earnings in 1987 than in the previous year.

J.P. Morgan overcame the tide of red ink in the banking industry despite an allowance for credit losses amounting to $1.708 billion at the end of 1987.

The bank posted net income of $83.3 million, 39 cents a share, in 1987.

J.P. Morgan's improvement in non-interest operating income in 1987 — $1.346 billion, up 10% from the $1.224 billion earned in 1986 — was in part offset by a decline in taxable-equivalent net interest earnings, which lagged because the bank placed $1.3 billion of Brazilian loans on a non-accrual basis.

Bankers Trust Co., the only other New York-based money center to finish in the black, posted a 2-cent-a-share profit in 1987 with net income of $1.2 million. That figure, which reflects the effect of a special credit loss addition of $700 million, would have been a record $637.2 million — $8.79 a share — were it not for the allowance.

**Downward pressure on the bottom line at large banks and brokerage houses**

| | Net income ($ millions) | | Earnings per share | |
|---|---|---|---|---|
| **Banks** | **1987** | **1986** | **1987** | **1986** |
| Bankers Trust | 1.2 | 427.9 | .02 | 6.01 |
| Chase Manhattan | -894.8 | 585.4 | -11.56 | 6.50 |
| Chemical New York | -853.7 | 402.4 | -16.68 | 7.57 |
| Citicorp | -1,138 | 1,058 | -4.26 | 3.57 |
| Manufacturers Hanover | -1,140.2 | 377.2 | -27.04 | 7.99 |
| J.P. Morgan | 83.3 | 872.5 | .39 | 4.74 |
| **Brokerage houses** | | | | |
| First Boston | 108.9 | 180.6 | 3.12 | 5.01 |
| Merrill Lynch | 390.6 | 454.3 | 3.51 | 4.15 |
| Morgan Stanley Group | 230.9 | 201.3 | 8.99 | 8.42 |
| PaineWebber | 72 | 75 | 2.17 | 2.49 |
| Shearson Lehman Hutton | 101 | 341 | 1 | X |
| Salomon | 142 | 516 | .86 | 3.32 |

X: Shearson Lehman was 100% owned by American Express Co. in 1986

Source: From company reports

The bank boosted its allowance for credit losses to $1.298 billion at the end of 1987 from $590.7 million the previous year.

Non-interest income — which totaled $1.632 billion, up $624.6 million or 62% from 1986 — powered much of the bank's profitable performance.

Citicorp, the nation's biggest bank, reported 1987 results that were shaped by its decision to augment reserves by $3 billion, which reduced earnings and equity by that amount. The bank reported a $1.1 billion loss, negative $4.26 a share in 1987.

Brazil's inability to pay any interest during the year resulted in a revenue shortfall of $333 million and an after-tax earnings impact of $200 million.

Manufacturers Hanover Corp. emerged from 1987 with the biggest loss among the New York money center banks — $1.14 billion or negative $27.04 cents a share.

It experienced a decline in net interest revenue and net yield because of its decision in the first quarter to place on non-accrual status about $1.5 billion of outstanding loans to Brazilian and Ecuadorian borrowers.

The Chase Manhattan Corp. and Chemical New York Corp. also suffered drops in net interest income, attributing the decline to the non-accrual status of South American loans.

Because of special items and tax benefits, Merrill Lynch reported net earnings of $390.6 million for 1987, down 14% from $454.3 million in 1986. Revenue for 1987 reached a record $10.9 billion, up 13.5% from the $9.6 billion reported in 1986.

PaineWebber Group Inc. reported net earnings of $72 million, down 4% from 1986. Revenue for the year was $2.4 billion, up slightly from the prior year. The firm attributed the relatively strong results to good performance from its fixed-income and asset management businesses that offset the October market crash-related losses.

First Boston Corp., Salomon Inc., and Shearson Lehman Brothers Holdings Inc. saw earnings plunge in 1987.

First Boston reported earnings of $108.9 million, down 40% from 1986, while revenue rose less than 1% to $1.32 billion.

Net earnings at Salomon Inc. slumped 72.5% for the year to $142 million compared to $516 million in 1986, while revenue fell to $6 billion from $6.8 billion. A slew of fourth-quarter charges pulled down the full-year results, including crash-related losses, layoff costs and a hefty charge resulting from pulling out of its new headquarters.

Shearson reported net income dropped to $101 million, down 70% from a record $341 million a year ago.

Revenue rose to $5.12 billion from $4.95 billion. Investment banking revenue dropped sharply, while investment advisory revenue climbed. ■


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PIPER

# Small banks lead equities

By Carol Wiley

Pooled equity funds run by three small banks outperformed all others for the quarter and year ended Dec. 31.

The top pooled equity fund in Pensions & Investments' Performance Evaluation Report for 1987 was managed by Beverly Trust Co. of Chicago, with a 22.4% return. It was followed by Citizens Heritage Bank of Piqua, Ohio, whose Cliran Equity Fund returned 20.1%.

By comparison, the Standard & Poor's 500 stock index returned 5.3% for the year and the PIPER median fund, 3.5%.

Beverly also finished fourth for the quarter with a return of 6.6%. The only equity funds not posting negative returns for the quarter were two run by First National Bank of Elgin Inc., Elgin, Ill. The bank's equity funds C and A were first and second with returns of 4.8% and 3.1% respectively.

The S&P 500 returned -22.5% for the quarter and the PIPER median, -21%.

The PIPER universe comprises 316 pooled equity funds of banks and insurance companies.

For the three-, five- and 10-year periods, the median fund scored compound annualized returns of 16.3, 14.4% and 14.7% respectively, and the S&P 500 returned 18.1%, 16.5% and 15.3%.

Perennial PIPER leader Sun Banks, Orlando, Fla., took top honors for those three periods, with annualized returns of 31.4%, 28.4% and 22.1%, respectively. Sun Banks also ranked highly for the year, returning 16.3%.

William Guth, Beverly Trust's senior investment officer, attributed the growth of the $11 million fund to a conservative investment approach. "We play it straight," Mr. Guth said. "We look out for quality issues and the most attractive sectors. There's no indexing, no options, no futures."

In August, the fund was holding **Delta Air Lines Inc.**, **Dow Chemical Co.**, **Monsanto Co.**, **General Electric Co.**, **Pfizer Inc.** and some railroad and oil company stocks.

In mid-October the fund began to sell, divesting almost all equities Oct. 16. After the crash, the fund cautiously re-entered the market, purchasing large-capitalization stocks such as **Caterpillar Inc.**, **Dow Chemical**, **Eastman Kodak Co.**, **GE** and **Philip Morris Cos. Inc.**

The $12 million Citizens Heritage fund, managed by James Investment Research Inc. of Alpha, Ohio, seeks out "stocks neglected by Wall Street, with good earnings, a clean balance sheet, not much debt, strength and relative performance," said Frank James, president of the investment firm.

First National Bank of Elgin got out of the equity market entirely in January 1987 and stayed out until November, when it became 50% invested in capital goods, metals and energy, according to William Palmer, vice president.

Both First of Elgin funds are small, holding between $5 million and $10 million each.

For the year, Beverly Trust and Citizens Heritage were followed by The Phoenix, Hartford, Conn., with 19.4%; First National Bank of Chicago, with 19.2%, and the growth fund of MTrust Corp., Dallas, with 18.3%.

Frank Stanley, portfolio director at The Phoenix, said caution early in the year, buying right after the crash, and an emphasis on sectors and stock selection added to the fund's gains for the year.

Phoenix recorded a fourth-quarter return of -7.6%, a three-year compound annualized return of 21%, and a five- and a 10-year return of 17%.

"One thing that was extremely important was that we got pretty cautious, so we went into October with pretty high reserves in excess of 30%," Mr. Stanley said. "In some funds, we were using Treasuries quite a bit.

"We started to take buy orders the next day (Oct. 20) and got fully invested and stayed that way to the end of the year."

*Continued on page 21*

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# Bond leaders keep it short

By Trudy Ring

Pooled bond funds with short maturities performed best in 1987, while those in intermediate to long bonds did better in other periods of the Pensions & Investments' Performance Evaluation Report.

The defensive bond fund managed by Hawaiian Trust Co., Honolulu, was the top PIPER performer of 1987, with a return of 8.9%. The PIPER survey covers 290 pooled fixed-income funds run by banks and insurance companies.

A majority of funds underperformed the Shearson Lehman Government/Corporate bond index in all periods except the year. In the quarter, the median PIPER fund returned 4.7% and the index 5.8%; for the year, the median return was 2.7%, the index 2.3%; for three years, the median was 11.9%, the index 12.8%; for five years, the median was 11.3%, the index 12.2%; and for 10 years, the median was 9.9%, the index 10.3%. All returns for periods of more than one year are compound annualized.

Hawaiian Trust's $80 million fund had an average maturity of slightly more than two years as of Dec. 31, said William Barton, senior vice president and chief investment officer. It generally has 85% to 88% of its assets in collapsible guaranteed investment contracts, which can be redeemed on six-month's notice, with the rest in money market instruments.

"Its main purpose is to provide high current yield with no principal volatility," Mr. Barton said of the fund. It tends to do well when interest rates are rising, as they did for much of 1987.

In the fourth quarter, when rates fell, so did its return, to 2.2%, in the bottom 10% of the PIPER universe. In the three years ended Dec. 31, the fund was just above the bottom 10%, with a compound annual return of 9.8%. It was too new for other periods of the survey.

First Alabama Bank of Mobile's bond fund was positioned well for 1987 after shortening its average maturity, roughly to three from

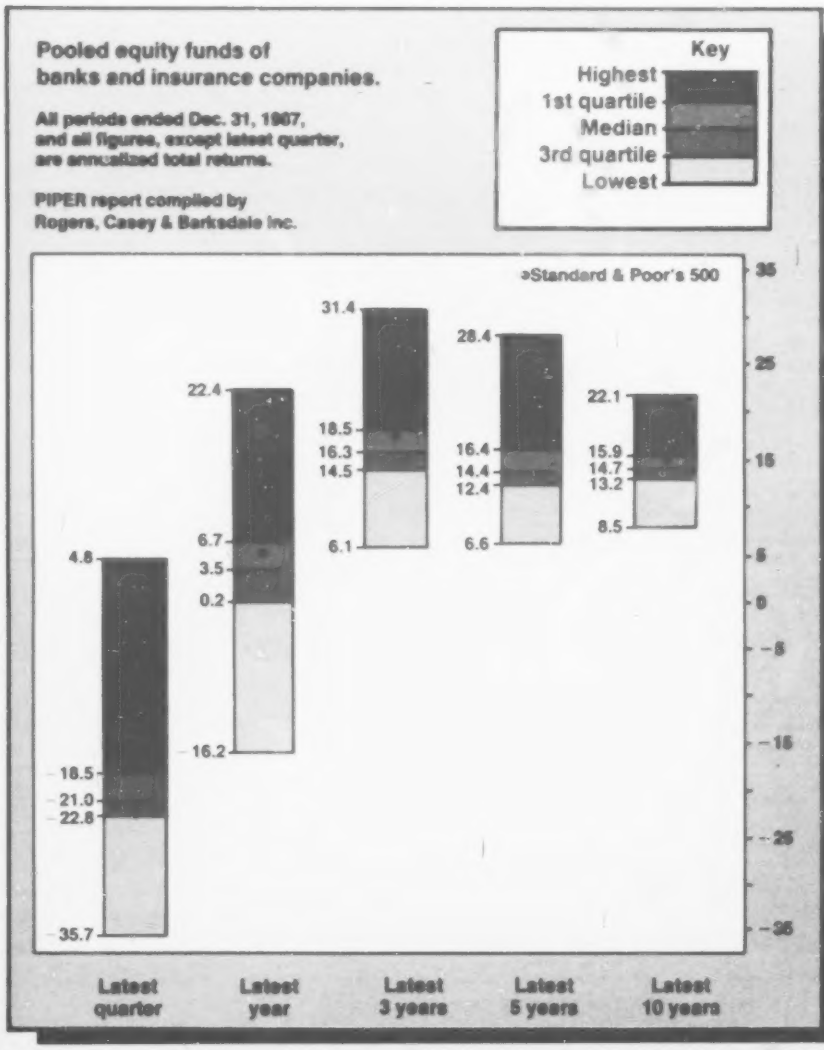
*Continued on page 21*

**The statistical data are extracted from *Pensions & Investments' Performance Evaluation Report*, a quarterly performance evaluation published by *Pensions & Investment Age*. PIPER details comparative performance data on equity and fixed-income funds at more than 250 banks and insurance companies. PIPER is compiled by Rogers, Casey & Barksdale Inc., Stamford, Conn.**

**Pooled equity funds of banks and insurance companies.**

**All periods ended Dec. 31, 1987, and all figures, except latest quarter, are annualized total returns.**

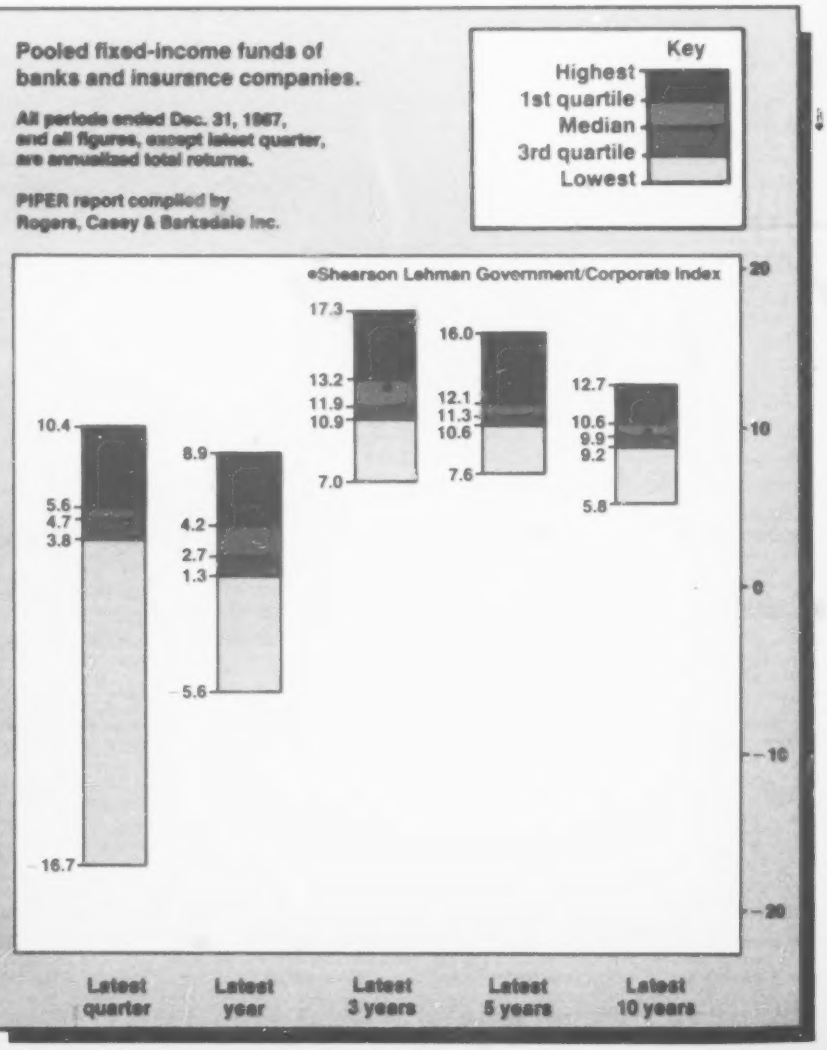
**PIPER report compiled by Rogers, Casey & Barksdale Inc.**




**Pooled fixed-income funds of banks and insurance companies.**

**All periods ended Dec. 31, 1987, and all figures, except latest quarter, are annualized total returns.**

**PIPER report compiled by Rogers, Casey & Barksdale Inc.**



PIPER

# Equity performance

## Cumulative periods ended 12/31/87

| | No. of years | | | |
|---|---|---|---|---|
| | 1 | 5 | 10 | DCR |
| | | % | | |
| Aetna Life & Casualty, Conn. | 7.7 | 15.1 | 16.3 | 3 |
| Alaska Pacific Trust | 9.2 | 14.2 | (1) | — |
| Allied Bank, Texas | 11.8 | 14.3 | 14.2 | 6 |
| American Nat'l, Minn. | 0.1 | 9.9 | 10.7 | 10 |
| American Nat'l Bank, Ind. | 4.5 | 12.4 | 12.5 | 9 |
| American Nat'l Bank, (Growth), Ind. | 2.8 | 14.2 | 13.5 | 8 |
| American Nat'l Bank, Tenn. | 7.2 | 15.0 | 14.5 | 6 |
| American Nat'l Chicago (Active) | 1.6 | 17.5 | 17.2 | 2 |
| American Nat'l Chicago (S&P index) | 5.3 | 16.5 | 15.2 | 4 |
| American Security, D.C. | 6.4 | 10.2 | 13.2 | 8 |
| AmeriTrust (Divers.), Ohio | 1.4 | 16.0 | 14.4 | 6 |
| AmSouth, Ala. | 0.0 | 11.7 | 15.2 | 5 |
| Associated Kellogg, Wis. | 5.5 | 13.1 | 13.5 | 8 |
| Associated Manitowoc, Wis. | 10.8 | 15.0 | 14.2 | 7 |
| Bank IV Wichita, Kan. | 1.8 | 9.7 | 10.3 | 10 |
| Bank of America (Index), Calif. | 4.9 | (1) | (1) | — |
| Bank of Delaware (VIP) | 4.4 | 14.4 | 15.2 | 5 |
| Bank of New England (Valuepath) | 5.1 | 18.5 | (1) | — |
| Bank of New York | 15.7 | 15.3 | 13.7 | 7 |
| Bank of Oklahoma, Tulsa | 5.8 | 14.0 | 14.6 | 6 |
| Bank of the West, Calif. | 16.2 | 12.5 | (1) | — |
| Bank of Tokyo, N.Y. | 1.8 | 15.7 | 16.2 | 3 |
| Bank One, Ind. | 3.0 | 13.2 | 13.0 | 9 |
| Bank One, Richmond (C), Ind. | 11.4 | (1) | (1) | — |
| Bankers Trust, N.Y. | 5.6 | 13.7 | 14.9 | 5 |
| Bankers Trust (Index), N.Y. | 5.8 | 16.8 | 15.5 | 4 |
| Barnett Banks Trust Co., Fla. | 0.7 | 16.6 | (1) | — |
| Bessemer Trust, N.Y. | 10.4 | 14.3 | 18.4 | 1 |
| Beverly Bank, Ill. | 22.4 | 13.8 | 14.7 | 6 |
| Boatmen's FNB Kansas City, Mo. | 4.7 | 11.8 | 13.1 | 8 |
| Boatmen's Nat'l, Mo. | 7.0 | 10.0 | 12.2 | 9 |
| Calcasieu Marine Nat'l Bank (E), La. | 0.8 | (1) | (1) | — |
| Centerre Trust, Mo. | 4.9 | 11.9 | 13.4 | 8 |
| Central Bank Monroe, La. | 7.8 | (1) | (1) | — |
| Central Fidelity, Va. | 2.5 | 14.3 | 14.4 | 6 |
| Chase Investors (OMB index), N.Y. | 5.1 | 16.5 | 15.3 | 4 |
| Chase Investors (Index), N.Y. | 5.2 | (1) | (1) | — |
| Chase Manhattan (B), N.Y. | 3.9 | 13.4 | 15.1 | 5 |
| Chemical Bank (Z), N.Y. | 5.2 | (1) | (1) | — |
| Chicago Title & Trust | 2.4 | 13.8 | 14.6 | 6 |
| CIGNA Corp. (SA A), Conn. | 2.8 | 12.4 | 15.8 | 3 |
| Citicorp, N.Y. | 5.4 | 14.7 | 16.0 | 3 |
| Citicorp (Indexplus), N.Y. | 6.4 | 16.7 | (1) | — |
| Citicorp (Integrated), N.Y. | 5.2 | (1) | (1) | — |
| Citicorp (Stockshift 100), N.Y. | 10.0 | (1) | (1) | — |
| Citicorp (Stockshift 200), N.Y. | 17.5 | (1) | (1) | — |
| Citicorp (Styleshift), N.Y. | 10.3 | (1) | (1) | — |
| Citizens Chillicothe (Emp.B), Mo. | 1.2 | 9.8 | 18.7 | 1 |
| Citizens Fidelity (Tr. E), Ky. | 7.3 | 16.9 | 15.5 | 4 |
| Citizens Heritage (Ciran), Ohio | 20.1 | (1) | (1) | — |
| Citizens & Southern, Ga. | 0.2 | 12.3 | 12.0 | 10 |
| Citytrust (E1), Conn. | 0.1 | 15.7 | 15.6 | 3 |
| CNA Insurance (SA A), Ill. | 6.5 | 14.4 | 11.9 | 10 |
| College Ret. Equities Fund | 5.3 | 17.5 | 15.7 | 3 |
| Colorado Nat'l Bank | 5.2 | 16.6 | 16.1 | 3 |
| Columbus Bank & Trust, Ga. | 1.0 | 11.8 | (1) | — |
| Commerce Bank St. Louis, Mo. | 0.3 | 14.6 | 13.9 | 7 |
| Commerce Bank-K.C., Mo. | 5.1 | 12.4 | 12.4 | 9 |
| Confederation Life, Ontario | 7.7 | 16.0 | 18.1 | 1 |
| Connecticut Bank & Trust | 2.0 | 13.1 | 14.1 | 7 |
| Connecticut Mutual Life (OM) | 3.5 | 15.5 | 15.2 | 5 |
| Connecticut Mutual Life (OM select) | 9.3 | (1) | (1) | — |
| Connecticut Nat'l Bank | 0.2 | 11.4 | 12.1 | 10 |
| Continental Bancorp, Pa. | 6.8 | 16.8 | 17.2 | 2 |
| Continental Illinois | 1.3 | 11.1 | 13.0 | 8 |
| Crown Life (U.S. grp.), Ontario | 15.0 | 13.7 | 14.4 | 6 |
| Cullen Bank, Texas | 5.2 | 18.7 | 14.9 | 5 |
| C&S Trust Florida | 3.5 | 16.4 | 16.5 | 2 |
| Dauphin Deposit (Corp.), Pa. | 1.8 | 15.6 | (1) | — |
| Dominion Trust (Corp), Va. | 7.6 | 17.0 | 15.4 | 4 |
| Employers Life of Wausau (SA 1), Wis. | 3.4 | 8.5 | 16.3 | 3 |
| Equibank, Pa. | 3.6 | 9.1 | 9.2 | 10 |
| Equitable Bank, Md. | 7.6 | 8.2 | 12.4 | 9 |
| Equitable Capital (10), N.Y. | 4.9 | (1) | (1) | — |
| Equitable Life (No. 1), N.Y. | 2.6 | 12.0 | 13.9 | 7 |
| Equitable Life (No. 4), N.Y. | 6.2 | 13.8 | 17.9 | 1 |
| Equitable Life (Q-vest 18), N.Y. | 8.1 | 14.5 | 15.9 | 3 |
| EF Hutton Trust (A), Del. | 0.1 | (1) | (1) | — |
| EF Hutton Trust (1), Del. | 7.1 | (1) | (1) | — |
| EF Hutton Trust (2), Del. | 5.6 | (1) | (1) | — |
| EF Hutton Trust (6), Del. | 0.8 | (1) | (1) | — |
| Fidelity Mgmt. Trust (Income), Mass. | 1.7 | 16.7 | (1) | — |
| Fifth Third Bank, Ohio | 0.8 | 13.3 | 15.2 | 4 |
| First Alabama Bank (I) | 13.2 | 17.4 | 15.6 | 3 |
| First Alabama, Mobile | 14.1 | 16.7 | 13.9 | 7 |
| First Bank Milwaukee | 6.1 | 10.8 | 13.5 | 8 |
| First City Nat'l Houston | 8.7 | 13.8 | 15.4 | 4 |
| First Fidelity Bank (Disc.), N.J. | 17.1 | 18.8 | 18.5 | 1 |
| First Fidelity Bank, N.J. | 18.0 | 17.0 | 16.5 | 2 |
| First Florida Bank | 3.9 | 12.7 | 12.5 | 9 |
| First Illinois (Corp.) | 12.3 | (1) | (1) | — |
| First Illinois (Personal) | 12.5 | (1) | (1) | — |
| First Interstate Billings, Mont. | 0.0 | (1) | (1) | — |
| First Interstate of Arizona | 5.3 | 13.0 | 13.4 | 8 |
| First Interstate of California | 5.9 | 10.3 | 12.1 | 9 |
| First Interstate of Oklahoma | 12.0 | 16.3 | 18.8 | 1 |
| First Interstate of Oregon | 0.2 | 18.8 | 16.5 | 2 |
| First Interstate of Washington | 4.3 | 14.5 | 16.1 | 3 |
| First Jersey Nat'l, N.J. | 5.0 | 15.9 | 14.7 | 6 |
| First Kentucky Trust (Ret.) | 4.7 | 14.8 | 15.0 | 5 |
| First Nat'l Lincoln, Neb. | 8.8 | 15.6 | 16.2 | 3 |
| First Nat'l of Tulsa, Okla. | 1.6 | 8.9 | 11.9 | 10 |
| First of America (Con. value), Mich. | 11.2 | (1) | (1) | — |
| First of America, Mich. | 3.2 | 18.9 | 16.6 | 2 |
| First of Boston | 0.4 | (1) | (1) | — |
| First of Chicago | 19.2 | 16.9 | 14.9 | 5 |
| First of Cincinnati, Ohio | 5.0 | 12.2 | 13.3 | 8 |
| First of Elgin (A), Ill. | 10.5 | (1) | (1) | — |
| First of Elgin (C), Ill. | 11.0 | 12.8 | 13.6 | 7 |
| First of Kenosha (CT4001), Wis. | 4.2 | 9.5 | 11.0 | 10 |
| First of Maryland | 9.7 | 15.6 | 15.2 | 5 |
| First of Minneapolis | 0.4 | 11.8 | 11.1 | 10 |
| First of Neenah, Wis. | 5.4 | 16.6 | 15.2 | 5 |
| First of Neenah, Wis. | 3.8 | 16.2 | 15.2 | 4 |
| First of Toledo, Ohio | 1.0 | 10.0 | 11.2 | 10 |
| First Pennsylvania Bank | 5.6 | 11.6 | 12.3 | 9 |
| First RepublicBank (Income), Texas | 0.9 | (1) | (1) | — |
| First RepublicBank, Texas | 7.0 | 11.5 | 13.9 | 7 |
| First RepublicBank, Texas | 0.9 | 19.3 | 16.6 | 2 |
| First Security Nat'l Bank (D), Ky. | 5.9 | 14.2 | (1) | — |
| First Trust Co., Minn. | 1.0 | 11.4 | 13.1 | 8 |
| First Union Bank, N.C. | 0.4 | 19.0 | 19.1 | 1 |
| First United Trust Co. (G), Ill. | 9.2 | 13.7 | 12.2 | 9 |
| First Variable Life, Ark. | 3.6 | 13.2 | 15.9 | 3 |
| First Wachovia Bank, N.C. | 5.6 | 14.7 | 13.6 | 7 |
| First Wachovia Bank (Mgmt.), N.C. | 6.2 | 12.2 | (1) | — |
| First Wisconsin Trust (Income) | 6.4 | 16.1 | 15.2 | 5 |
| First Wisconsin Trust (Index) | 5.3 | (1) | (1) | — |
| Frost Nat'l, (A), Texas | 6.9 | 18.0 | 12.3 | 9 |
| Gary Wheaton Bank, Ill. | 1.8 | 12.1 | 13.7 | 7 |
| Gary Wheaton Bank (Hedged), Ill. | 2.6 | (1) | (1) | — |
| General American (Index), Mo. | 6.0 | (1) | (1) | — |
| Greeley Nat'l, Colo. | 9.0 | 9.0 | 8.5 | 10 |
| Guardian Insurance (VA 1), N.Y. | 3.4 | 19.2 | 19.4 | 1 |
| Hamilton Bank, Pa. | 2.6 | 14.4 | 15.0 | 5 |
| Harris Trust, Ill. | 4.4 | 13.6 | 13.7 | 7 |
| Harris Trust (Low p/e), Ill. | 2.5 | (1) | (1) | — |
| Hawaiian Trust | 6.9 | 13.9 | 14.5 | 6 |
| Hibernia Nat'l, La. | 5.9 | 12.2 | 12.4 | 9 |
| Home Life, N.Y. | 2.7 | 10.3 | 16.4 | 2 |
| HT Investors, R.I. | 5.3 | 14.2 | 15.1 | 5 |
| IAA Trust Co. | 9.6 | 14.6 | 15.8 | 3 |
| IDS Trust Co. (A), Minn. | 9.2 | 16.9 | (1) | — |
| Imperial Trust Co., Calif. | 2.4 | (1) | (1) | — |
| Indiana Nat'l Bank | 2.9 | 11.8 | 13.3 | 8 |
| Irving Trust, N.Y. | 7.1 | 16.4 | 14.6 | 6 |
| Jefferson Trust (CT growth), Ill. | 7.3 | 14.6 | 13.1 | 8 |
| John Hancock (1K), Mass. | 6.2 | 17.1 | (1) | — |
| John Hancock (1L), Mass. | 2.6 | 16.4 | (1) | — |
| Key Trust Co., N.Y. | 4.7 | 12.2 | 12.5 | 9 |
| Lake Shore Nat'l, Ill. | 1.9 | 16.6 | 17.1 | 2 |
| LaSalle Nat'l (Core), Ill. | 4.9 | (1) | (1) | — |
| LaSalle Nat'l (Intrinsic), Ill. | 4.6 | 17.5 | (1) | — |
| Liberty Nat'l, Ky. | 1.1 | (1) | (1) | — |
| Liberty Nat'l, Okla. | 10.2 | 14.9 | 15.3 | 4 |
| Long Island Trust, N.Y. | 3.1 | 9.9 | 13.8 | 7 |
| Manufacturers Detroit | 1.2 | 17.8 | 17.4 | 1 |
| Manufacturers Hanover (Gr. tr.), N.Y. | 3.1 | 11.0 | 13.3 | 8 |
| Manufacturers Life, Ontario | 5.0 | 14.0 | 20.8 | 1 |
| Massachusetts Mutual | 2.5 | 16.3 | 16.6 | 2 |
| Mellon Bank, Pa. | 6.0 | 18.9 | 14.6 | 6 |
| Mercantile Bank, Mo. | 1.2 | 17.0 | 14.2 | 6 |
| Mercantile Nat'l, Ind. | 4.3 | 7.7 | (1) | — |
| Mercantile Safe, Md. | 3.9 | 16.4 | 15.5 | 4 |
| Merchants Nat'l (2), Ind. | 2.5 | 14.8 | 13.8 | 7 |
| Merchants Nat'l (I), Ind. | 2.8 | 11.1 | 12.6 | 9 |
| Meridian Trust, Pa. | 2.3 | 15.4 | 14.4 | 6 |
| Metropolitan Life (SA 40), N.Y. | 2.7 | (1) | (1) | — |
| Mich. Nat'l of Grand Rapids | 6.4 | 8.7 | 10.2 | 10 |
| Midlantic Nat'l, N.J. | 6.5 | 11.2 | (1) | — |
| Mid-State Bancorp, Pa. | 1.9 | 14.2 | 14.8 | 5 |
| Minnesota Mutual (SA C) | 3.5 | 10.0 | 12.4 | 9 |
| Morgan Guaranty, N.Y. | 6.6 | 16.2 | (1) | — |
| Morgan Guaranty (Large co.), N.Y. | 5.4 | 17.8 | 14.3 | 6 |
| MTrust (Growth), Texas | 18.3 | 16.2 | 18.5 | 1 |
| MTrust (Value), Texas | 4.8 | 17.5 | 16.4 | 2 |
| Mutual Benefit, N.J. | 2.7 | 15.2 | 14.9 | 5 |
| Mutual of America (SA 1), N.Y. | 3.9 | 13.1 | (1) | — |
| Mutual of America (SA 2), N.Y. | 10.2 | (1) | (1) | — |
| Mutual Service Life (SA B), Minn. | 0.2 | 14.6 | (1) | — |
| Nationwide Life Ins. | 1.8 | 17.3 | 16.9 | 2 |
| Nat'l Bank of Detroit | 3.2 | 13.7 | 12.3 | 9 |
| Nat'l Bank of Commerce, Neb. | 1.9 | 14.6 | 18.4 | 1 |
| Nat'l City Cleveland | 5.6 | 15.3 | 16.5 | 2 |
| Nevada Nat'l Bank | 3.2 | (1) | (1) | — |
| New England Mutual, Mass. | 3.6 | 11.7 | 14.9 | 5 |
| New England Mutual (Growth), Mass. | 17.7 | 16.6 | 20.2 | 1 |
| New York Life Ins. (SA 6) | 3.7 | (1) | (1) | — |
| New York Life Ins. (SA 1) | 7.3 | 11.6 | 11.6 | 10 |
| Norstar Trust Co., N.Y. | 10.8 | 15.9 | 16.1 | 3 |
| Northern States Trust Co., Ill. | 3.1 | (1) | (1) | — |
| Northern Trust (Divers.), Ill. | 0.8 | 12.4 | 14.3 | 6 |
| Old Second Nat'l, Ill. | 1.0 | 13.2 | 13.2 | 8 |
| Oregon Bank | 0.4 | 14.4 | 12.9 | 9 |
| Pacific Inland Bank, Calif. | 0.2 | (1) | (1) | — |
| Pacific Mutual, Calif. | 3.7 | 11.1 | 13.1 | 8 |
| Penn Mutual Life (SA A), Pa. | 4.3 | 14.6 | 15.4 | 4 |
| Philadelphia Nat'l, Pa. | 6.7 | 15.3 | 17.5 | 1 |
| Philadelphia Nat'l, Pa. | 2.3 | 17.6 | 15.4 | 4 |
| Phoenix Mutual, Conn. | 19.8 | 17.0 | 17.0 | 2 |
| Pioneer Bank, Ill. | 8.9 | 17.4 | (1) | — |
| Pittsburgh Nat'l (QMS) | 0.3 | 13.8 | (1) | — |
| Planters Nat'l (B), N.C. | 0.9 | 9.6 | 12.9 | 9 |
| Principal Mutual Life, Iowa | 5.4 | 17.4 | 17.1 | 2 |
| Provident Bank, Ohio | 3.9 | 9.4 | 11.4 | 10 |
| Provident Mutual (SA 1), Pa. | 1.5 | 12.4 | 13.7 | 7 |
| Provident Nat'l, Pa. | 0.8 | 17.6 | 17.4 | 1 |
| Prudential (PRIDEX-W-5000), N.J. | 0.4 | 13.5 | (1) | — |
| Prudential (PRIFORM-low p/e), N.J. | 7.8 | 15.4 | (1) | — |
| Prudential (VCA-9), N.J. | 6.7 | 13.0 | 14.2 | 6 |
| Puget Sound Nat'l, Wash. | 5.3 | 13.3 | 14.5 | 6 |
| Resource Bank & Trust, Minn. | 4.2 | 10.5 | (1) | — |
| SeaFirst Bank, Wash. | 5.2 | 10.2 | 13.7 | 7 |
| Security Nat'l Bank, W.Va. | 6.1 | 13.4 | (1) | — |
| Security Pacific (E), Calif. | 18.0 | 10.2 | (1) | — |
| Security Pacific, Calif. | 2.7 | (1) | (1) | — |
| Security Pacific (Income-B), Calif. | 0.7 | 14.4 | (1) | — |
| Shawmut Bank, Mass. | 3.2 | 13.3 | (1) | — |
| Signet Bank/Maryland (D) | 0.8 | 12.5 | 14.1 | 7 |
| Signet Trust Co. | 3.1 | 16.5 | 16.1 | 3 |
| Society Nat'l (Ret. value), Ohio | 5.2 | 16.3 | 14.8 | 5 |
| South Carolina Nat'l | 9.0 | (1) | (1) | — |
| Southeast Bank, Fla. | 1.0 | 14.8 | 15.4 | 4 |
| Southtrust Bank, Ala. | 7.3 | 13.1 | 11.2 | 10 |
| Sovran Bank (Inst.), Va. | 9.2 | 17.5 | 15.1 | 5 |
| State Street Bank, Mass. | 4.2 | 15.4 | 15.7 | 3 |
| State Street Bank (Matrix Synthesis) | 4.6 | (1) | (1) | — |
| State Street Bank (S&P index), Mass. | 5.2 | 16.4 | 15.2 | 4 |
| State Street Bank (Value 1), Mass. | 1.3 | (1) | (1) | — |
| Stock Yards Bank (Emp. benefit), Ky. | 5.5 | (1) | (1) | — |
| Stock Yards Bank (Trust), Ky. | 11.0 | (1) | (1) | — |
| Summit Bank, Ind. | 1.3 | 12.4 | 13.1 | 8 |
| Summit Trust Co., N.J. | 14.2 | 15.6 | 12.0 | 10 |
| Sun Bank, N.J. | 16.3 | 28.4 | 22.1 | 1 |
| Texas Commerce (Divers.) | 6.4 | 15.7 | 17.1 | 2 |
| Third Nat'l Nashville, Tenn. | 6.0 | 6.6 | 11.1 | 10 |
| Toledo Trust, Ohio | 3.3 | 14.7 | 13.1 | 8 |
| Travelers, Conn. | 0.7 | 11.2 | 13.2 | 8 |
| Trust Co. of West (Stategy), Calif. | 2.8 | (1) | (1) | — |
| Unibanctrust, Ill. | 7.6 | 13.3 | 15.8 | 3 |
| Union Nat'l Wichita, Kan. | 4.0 | 6.7 | 10.1 | 10 |
| U.S. Nat'l of Galveston, Texas | 2.1 | 16.4 | 17.5 | 1 |
| U.S. Nat'l of Oregon (Qualivest) | 8.9 | 15.6 | 18.4 | 1 |
| Valley Fidelity, Tenn. | 0.6 | 13.3 | 15.5 | 4 |
| Valley Nat'l (I), Ariz. | 12.0 | 16.2 | 13.8 | 7 |
| Wellington Trust (Divers.), Mass. | 9.1 | 15.8 | (1) | — |
| Wellington Trust (Income), Mass. | 2.6 | (1) | (1) | — |
| Wells Fargo (Index), Calif. | 5.2 | 16.6 | 15.3 | 4 |
| Wells Fargo (Tilts & Timing), Calif. | 2.1 | (1) | (1) | — |
| Wheeling Dollar Bank, W.Va. | 10.8 | 15.8 | 17.1 | 2 |
| Wilmington Trust (Growth), Del. | 2.9 | (1) | (1) | — |
| Wilmington Trust (Total return), Del. | 7.1 | (1) | (1) | — |
| Wilmington Trust (Value), Del. | 1.3 | (1) | (1) | — |
| **Standard & Poor's 500 Index** | **5.3** | **16.5** | **15.3** | **4** |

# Fixed-income performance

## Cumulative periods ended 12/31/87

| | No. of years | | | |
|---|---|---|---|---|
| | 1 | 5 | 10 | DCR |
| | | % | | |
| Aetna Life & Cas. (SA 76), Conn. | 2.7 | 12.3 | (1) | — |
| Alaska Pacific Trust | 4.2 | 10.5 | (1) | — |
| American Nat'l, Minn. | 2.1 | 11.3 | 10.6 | 3 |
| American Nat'l Bank, Ind. | 1.4 | 9.7 | 9.8 | 6 |
| American Nat'l Bank (Income), Ind. | 1.2 | 8.8 | 8.7 | 9 |
| American Nat'l Bank, Tenn. | 1.9 | 12.0 | 10.9 | 2 |
| American Security, D.C. | 2.9 | 13.1 | 12.0 | 1 |
| AmeriTrust, Ohio | 2.7 | 11.1 | 9.2 | 8 |
| AmeriTrust (Reserve), Ohio | 5.3 | 10.2 | 11.1 | 2 |
| AmSouth, Ala. | 1.2 | 12.1 | 8.9 | 9 |
| AmSouth (Ltd. mat.), Ala. | 6.3 | 9.9 | (1) | — |
| Associated Kellogg, Wis. | 4.4 | 10.8 | 9.6 | 7 |
| Associated Manitowoc (High inc.), Wis. | 0.1 | 11.5 | 9.8 | 6 |
| Bank IV Wichita, Kan. | 1.3 | 11.2 | 12.3 | 1 |
| Bank of America, Calif. | 3.6 | 11.6 | 9.0 | 8 |
| Bank of Delaware | 2.9 | 10.0 | 8.9 | 9 |
| Bank of New England, Mass. | 0.5 | 11.6 | 11.0 | 2 |
| Bank of New York | 1.0 | 11.1 | 9.8 | 6 |
| Bank of Oklahoma, Tulsa | 1.2 | 10.4 | 8.4 | 10 |
| Bank of Tokyo (Inter.), N.Y. | 2.3 | 11.1 | (1) | — |
| Bank One, Ind. | 2.8 | 11.6 | 9.4 | 8 |
| Bankers Trust (A), N.Y. | 2.8 | 11.7 | 10.8 | 2 |
| Bankers Trust (B), N.Y. | 3.6 | 1.5 | 11.0 | 2 |
| Bessemer Trust, N.Y. | 2.4 | 11.7 | 10.4 | 4 |
| Beverly Bank, Ill. | 2.4 | 13.7 | 12.1 | 1 |
| Boatmen's FNB Kansas City, Mo. | 1.8 | 11.2 | (1) | — |
| Boatmen's Nat'l, Mo. | 1.8 | 10.6 | 11.1 | 2 |
| Calcasieu Marine Nat'l (E), La. | 0.6 | (1) | (1) | — |
| Centerre Trust, Mo. | 3.2 | 13.6 | 11.9 | 1 |
| Central Bank Monroe, La. | 4.6 | (1) | (1) | — |
| Central Fidelity, Va. | 4.6 | 13.8 | 11.3 | 1 |
| Central Fidelity Bank (Short), Va. | 6.4 | (1) | (1) | — |
| Chase Investors (CMB index), N.Y. | 2.1 | (1) | (1) | — |
| Chase Manhattan (A), N.Y. | 4.5 | 11.0 | 9.7 | 7 |
| Chase Manhattan (Inter.), N.Y. | 2.4 | (1) | (1) | — |
| Chase Manhattan (Long-term), N.Y. | 0.3 | (1) | (1) | — |
| Chase Manhattan (Sec. mtg.), N.Y. | 2.9 | (1) | (1) | — |
| Chase Manhattan (Short-inter.), N.Y. | 6.3 | (1) | (1) | — |
| Chemical Bank (2), N.Y. | 1.3 | (1) | (1) | — |
| Chicago Title & Trust | 3.3 | 12.0 | 9.8 | 6 |
| CIGNA Corp. (Active), Conn. | 0.3 | 12.6 | 10.6 | 3 |
| CIGNA Corp. (Inter.), Conn. | 2.0 | 12.6 | 10.6 | 3 |
| Citicorp, N.Y. | 2.0 | 12.9 | 10.6 | 3 |
| Citizens Commi. & Svgs. (Inter.), Mich. | 2.5 | 11.9 | 10.0 | 5 |
| Citizens Fidelity, Ky. | 3.2 | 10.7 | 10.4 | 4 |
| Citizens & Southern, Ga. | 1.8 | 11.3 | 8.5 | 10 |
| Citytrust (E3), Conn. | 2.4 | 10.5 | 9.3 | 8 |
| Colorado Nat'l Bank | 3.6 | 13.1 | 10.3 | 4 |
| Columbus Bank & Trust, Ga. | 6.0 | 12.5 | (1) | — |
| Commerce Bank St. Louis, Mo. | 2.9 | 10.6 | 9.9 | 5 |
| Commerce Bank K.C., Mo. | 0.5 | 10.2 | 8.7 | 9 |
| Commerce Union, Tenn. | 6.8 | 9.9 | 11.1 | 2 |
| Confederation Life (Amer.), Ontario | 2.8 | 11.6 | 9.4 | 7 |
| Connecticut Bank & Trust | 1.9 | 10.8 | 8.3 | 10 |
| Connecticut Nat'l Bank | 0.5 | 13.9 | 10.9 | 2 |
| Connecticut Nat'l Bank | 1.2 | 12.1 | (1) | — |
| Continental Bancorp, Pa. | 4.4 | 8.5 | 8.1 | 10 |
| Continental Illinois | 2.1 | 11.7 | 8.9 | 9 |
| Continental Illinois (Inter.) | 3.9 | 10.9 | 9.5 | 7 |
| Crown Life (U.S. grp.), Ontario | 0.2 | 10.4 | 8.7 | 9 |
| Cullen Bank, Texas | 4.8 | 11.3 | 11.0 | 2 |
| C&S Trust Florida | 2.1 | 11.4 | 10.5 | 4 |
| Dauphin Deposit (Corp.), Pa. | 1.9 | 11.7 | (1) | — |
| Dauphin Deposit (Short), Pa. | 6.4 | (1) | (1) | — |
| Delaware Trust | 3.4 | 16.0 | (1) | — |
| Equibank, Pa. | 2.3 | 10.1 | 9.0 | 9 |
| Equitable Bank, Md. | 0.1 | 11.0 | 8.2 | 10 |
| Equitable Life (5), N.Y. | 5.9 | 13.9 | 9.8 | 6 |
| Exchange Nat'l Bank | 4.4 | 12.2 | 10.1 | 5 |
| EF Hutton Trust (A), Del. | 2.7 | (1) | (1) | — |
| EF Hutton Trust (B), Del. | 0.3 | (1) | (1) | — |
| EF Hutton Trust (2), Del. | 0.8 | (1) | (1) | — |
| EF Hutton Trust (Inter. govt. B), Del. | 2.4 | (1) | (1) | — |
| Fidelity Bank, Pa. | 0.8 | 11.8 | 12.1 | 1 |
| Fifth Third Bank, Ohio | 1.7 | 11.7 | (1) | — |
| First Alabama, Mobile | 8.8 | 14.3 | 10.0 | 5 |
| First Bank of Milwaukee | 1.1 | 11.3 | 10.7 | 3 |
| First City Nat'l Houston | 2.2 | 11.8 | 9.6 | 7 |
| First Fidelity, N.J. | 0.2 | 10.3 | 8.9 | 9 |
| First Fidelity (Inter.), N.J. | 3.8 | 10.2 | 10.4 | 4 |
| First Florida Bank | 2.8 | 10.7 | 9.8 | 6 |
| First Interstate of Arizona | 3.1 | 13.8 | 11.3 | 2 |
| First Interstate of California | 2.4 | 13.0 | 11.4 | 1 |
| First Interstate of Oklahoma | 3.6 | 10.6 | 7.6 | 10 |
| First Interstate of Oregon | 2.4 | 11.4 | 9.9 | 6 |
| First Interstate of Washington | 0.6 | 11.2 | 9.5 | 7 |
| First Jersey Nat'l, N.J. | 0.7 | 11.8 | 11.3 | 2 |
| First Kentucky Trust (Ret.) | 3.7 | 13.3 | 11.6 | 1 |
| First Nat'l Lincoln, Neb. | 3.2 | 11.9 | 10.1 | 5 |
| First Nat'l of Tulsa, Okla. | 1.1 | 9.1 | 8.6 | 9 |
| First of America, Mich. | 0.8 | 8.0 | 8.5 | 9 |
| First of Boston (Inter.) | 0.6 | 11.3 | 9.0 | 8 |
| First of Chicago | 4.6 | 13.1 | 10.6 | 3 |
| First of Chicago (Dollar) | 2.1 | 13.5 | (1) | — |
| First of Cincinnati (Unrestr.) | 1.3 | 11.0 | 9.2 | 8 |
| First of Cincinnati (Inter.) | 3.8 | 9.6 | (1) | — |
| First of Elgin (D), Ill. | 5.8 | 8.7 | 9.2 | 8 |
| First of Elgin (D1), Ill. | 6.7 | 9.8 | (1) | — |
| First of Kenosha (CT4002), Wis. | 3.0 | 7.6 | 5.8 | 10 |
| First of Maryland | 4.8 | 12.1 | 10.8 | 3 |
| First of Minneapolis | 0.6 | 9.8 | 8.3 | 10 |
| First of Neenah (Inter.), Wis. | 3.9 | 10.5 | 10.3 | 4 |
| First of Neenah (Long term), Wis. | 4.6 | 11.3 | 10.7 | 3 |
| First of Neenah (Mtg.), Wis. | 6.3 | 12.2 | (1) | — |
| First of Toledo, Ohio | 3.0 | 10.3 | 9.9 | 6 |
| First Pennsylvania Bank | 1.5 | 9.2 | 8.5 | 9 |
| First Security Nat'l Bank (F), Ky. | 0.3 | 10.1 | (1) | — |
| First Trust Co., Minn. | 1.0 | 10.6 | 9.5 | 7 |
| First Union Bank, N.C. | 4.7 | 11.4 | 9.7 | 7 |
| First Union Bank (1), N.C. | 6.4 | (1) | (1) | — |
| First United Trust (I), Ill. | 2.0 | 10.3 | 9.0 | 8 |
| First Variable Life, Ark. | 4.5 | 14.4 | (1) | — |
| First Variable Life (H.Q.), Ark. | 0.9 | 13.3 | (1) | — |
| First Wachovia Bank, N.C. | 2.7 | 11.7 | 10.5 | 4 |
| First Wisconsin Trust (Inter.) | 1.9 | 11.7 | 9.7 | 7 |
| First Wisconsin Trust (Passive inter.) | 4.3 | (1) | (1) | — |
| First Wisconsin Trust (Index) | 2.7 | (1) | (1) | — |
| FirstRepublicBank, Texas | 1.5 | 11.9 | 9.5 | 7 |
| Frost Nat'l, Texas | 1.0 | 10.7 | 9.0 | 8 |
| Gary Wheaton Bank, Ill. | 1.4 | 11.2 | 10.1 | 5 |
| General American (SA 8), Mo. | 0.7 | 12.1 | (1) | — |
| General American (SA 9), Mo. | 4.3 | 13.0 | (1) | — |
| Greeley Nat'l, Colo. | 3.6 | 11.1 | 10.1 | 5 |
| Hamilton Bank, Pa. | 3.0 | 12.6 | (1) | — |
| Harris Trust, Ill. | 4.5 | 12.5 | 9.3 | 8 |
| Harris Trust (Gain), Ill. | 5.4 | (1) | (1) | — |
| Hawaiian Trust | 5.6 | 9.8 | 9.3 | 8 |
| Hawaiian Trust (Defensive) | 8.9 | 9.6 | (1) | — |
| Hibernia Nat'l, La. | 1.4 | 11.4 | 11.7 | 1 |
| Home Life, N.Y. | 3.5 | (1) | (1) | — |
| HT Investors, R.I. | 5.4 | 12.1 | 9.4 | 8 |
| HT Investors (A), R.I. | 1.7 | (1) | (1) | — |
| IAA Trust Co. (B), Ill. | 3.0 | 14.6 | 10.7 | 3 |
| Imperial Trust Co., Calif. | 1.6 | (1) | (1) | — |
| Indiana Nat'l Bank | 3.0 | 11.6 | 10.6 | 3 |
| Irving Trust, N.Y. | 1.3 | 10.9 | 9.8 | 6 |
| Jefferson Trust, Ill. | 3.5 | 10.3 | 10.5 | 4 |
| John Hancock, Mass. | 2.9 | 13.1 | 10.9 | 2 |
| Key Trust Co., N.Y. | 1.1 | 12.9 | 10.5 | 4 |
| Lake Shore Nat'l, Ill. | 3.4 | 10.5 | 8.9 | 9 |
| LaSalle Nat'l (Inter.), Ill. | 2.4 | 11.3 | 8.9 | 9 |
| LaSalle Nat'l (Long term), Ill. | 1.4 | (1) | (1) | — |
| Liberty Nat'l, Ky. | 2.4 | 12.4 | 10.0 | 5 |
| Liberty Nat'l, Okla. | 1.5 | 10.7 | 8.3 | 10 |
| Life of Virginia | 1.2 | 13.9 | 11.5 | 1 |
| Long Island Trust, N.Y. | 3.3 | 9.8 | 8.1 | 10 |
| Manufacturers Detroit | 2.1 | 12.2 | 11.1 | 2 |
| Manufacturers Detroit (Inter. H) | 5.0 | 11.1 | (1) | — |
| Manufacturers Hanover (Gr. tr.), N.Y. | 1.0 | 10.9 | 11.1 | 2 |
| Manufacturers Life (B), Ontario | 1.1 | 10.8 | (1) | — |
| Massachusetts Mutual | 2.8 | 12.1 | 10.4 | 4 |
| Mellon Bank, Pa. | 2.0 | 12.1 | 10.4 | 4 |
| Mercantile Bank, Mo. | 0.0 | 11.3 | 10.7 | 3 |
| Mercantile Nat'l, Ind. | 3.2 | 8.7 | (1) | — |
| Mercantile Safe, Md. | 6.3 | 11.6 | 10.6 | 3 |
| Mercantile Safe (Inter.), Md. | 6.3 | 11.2 | (1) | — |
| Merchants Nat'l, Ind. | 2.5 | 10.5 | 9.8 | 6 |
| Meridian Trust, Pa. | 2.2 | 11.2 | (1) | — |
| Metropolitan Life (SA 41), N.Y. | 0.2 | (1) | (1) | — |
| Mich. Nat'l of Grand Rapids | 5.4 | 11.5 | 9.3 | 8 |
| Midlantic Nat'l, N.J. | 4.1 | 11.9 | 9.6 | 7 |
| Mid-State Bancorp, Pa. | 5.6 | 11.6 | 11.0 | 2 |
| Minnesota Mutual (SA E) | 3.5 | 10.9 | 9.6 | 7 |
| Morgan Guaranty, N.Y. | 4.2 | 13.3 | 11.4 | 1 |
| MTrust, Texas | 2.8 | 11.1 | 8.8 | 9 |
| Nat'l Bank of Detroit | 2.3 | 11.8 | 10.2 | 5 |
| Nat'l Bank of Commerce, Neb. | 3.3 | 12.5 | 9.8 | 6 |
| Nat'l City Cleveland | 1.0 | 10.4 | 9.0 | 8 |
| Nevada Nat'l Bank | 4.2 | (1) | (1) | — |
| New England Mutual, Mass. | 1.3 | 10.6 | 8.5 | 10 |
| New York Life (Convertible) | 5.4 | (1) | (1) | — |
| New York Life Ins. (SA 4) | 3.7 | (1) | (1) | — |
| Norstar Trust, N.Y. | 5.4 | 12.6 | 10.1 | 5 |
| Northern Trust, Ill. | 2.8 | 12.5 | 10.0 | 5 |
| Northern Trust (Inter.), Ill. | 3.4 | 9.9 | 11.3 | 2 |
| Old Second Nat'l, Ill. | 2.7 | 11.3 | 9.5 | 7 |
| Old Second Nat'l (HR 10) | 3.0 | 11.0 | 9.7 | 6 |
| Oregon Nat'l | 1.6 | 11.7 | 10.5 | 3 |
| Pacific Financial Co. (Hyr.), Calif. | 7.5 | (1) | (1) | — |
| Pacific Inland Bank, Calif. | 0.0 | (1) | (1) | — |
| Pacific Mutual, Calif. | 5.1 | 13.3 | 12.1 | 1 |
| Philadelphia Nat'l | 3.0 | 12.4 | 10.3 | 5 |
| Philadelphia Nat'l | 3.2 | 8.3 | 6.5 | 10 |
| Phoenix Mutual, Conn. | 1.6 | (1) | (1) | — |
| Pioneer Bank, Ill. | 3.3 | 10.1 | (1) | — |
| Principal Mutual Life, Iowa | 4.1 | (1) | (1) | — |
| Provident Nat'l, Pa. | 1.0 | 11.3 | 10.0 | 5 |
| Prudential (VCA 8), N.J. | 5.2 | 11.1 | (1) | — |
| Puget Sound Nat'l, Wash. | 2.1 | 8.7 | 8.9 | 9 |
| SeaFirst Bank, Wash. | 3.1 | 11.5 | 11.9 | 1 |
| Security Nat'l Bank, W.Va. | 2.5 | 9.6 | (1) | — |
| Security Pacific, Calif. | 2.1 | (1) | (1) | — |
| Sentry Life (SA D), Wis. | 3.4 | (1) | (1) | — |
| Shawmut Bank, Mass. | 3.3 | 12.2 | (1) | — |
| Shawmut Bank (Inter.), Mass. | 4.8 | 10.2 | (1) | — |
| Signet Bank/Maryland (Short term) | 6.1 | 10.8 | (1) | — |
| Society Nat'l, Ohio | 4.5 | 12.7 | 10.6 | 3 |
| South Carolina Nat'l (Inter. F.) | 1.7 | (1) | (1) | — |
| Southeast Bank, Fla. | 1.7 | 11.5 | 9.7 | 7 |
| Southtrust Bank, Ala. | 3.9 | 11.2 | 9.9 | 5 |
| Sovran Bank (Inst.), Va. | 4.5 | 13.5 | 12.7 | 1 |
| State Bank & Trust (D), Ohio | 2.5 | (1) | (1) | — |
| State Street Bank, Mass. | 1.3 | 12.2 | 9.8 | 6 |
| Summit Bank, Ind. | 3.6 | 9.3 | 8.1 | 10 |
| Summit Trust Co., N.J. | 5.9 | 11.4 | 10.4 | 4 |
| Sun Bank, Fla. | 0.8 | 11.4 | 9.7 | 6 |
| Sunburst Bank, Miss. | 2.2 | 13.2 | 8.5 | 10 |
| Texas Commerce (Active) | 1.9 | 11.2 | 11.9 | 1 |
| Texas Commerce (Low vol.) | 5.8 | 11.3 | (1) | — |
| Third Nat'l Nashville, Tenn. | 3.3 | 9.7 | 9.2 | 8 |
| Toledo Trust, Ohio | 2.3 | 12.0 | 10.7 | 3 |
| Transamerica Life (SA T-2), Calif. | 4.1 | (1) | (1) | — |
| Travelers (SA D), Conn. | 4.2 | 12.1 | (1) | — |
| Travelers (SA P), Conn. | 0.1 | 12.7 | 10.4 | 4 |
| Trust Co. of the West (Convert. strat.) | 1.0 | (1) | (1) | — |
| Trust Co. of the West (Convert. value) | 1.3 | (1) | (1) | — |
| Trust Co. of the West (High yield) | 5.6 | (1) | (1) | — |
| Trustmark Nat'l, Miss. | 8.7 | 12.4 | 10.5 | 3 |
| Unibanctrust, Ill. | 4.4 | 10.1 | 9.4 | 7 |
| U.S. Nat'l of Oregon (Qualivest) | 2.5 | 11.4 | 8.9 | 9 |
| Valley Fidelity, Tenn. | 5.5 | 10.9 | 10.0 | 5 |
| Valley Nat'l (II), Ariz. | 4.4 | 11.5 | 9.7 | 6 |
| Wellington Trust (Inter.), Mass. | 1.7 | 11.9 | (1) | — |
| Wellington Trust (Long term), Mass. | 0.5 | (1) | (1) | — |
| Wellington Trust (Mtg.), Mass. | 1.4 | (1) | (1) | — |
| Wells Fargo (Index), Calif. | 2.3 | (1) | (1) | — |
| Wheeling Dollar Bank, W.Va. | 8.3 | 11.2 | 9.8 | 6 |
| Wilmington Trust, Del. | 8.5 | 8.9 | 8.3 | 10 |
| **Shearson Lehman G/C Index** | **2.3** | **12.2** | **10.3** | **4** |

PIPER

## Top quartile commingled equity funds

### 3-month returns

| | % |
|---|---|
| First of Elgin (C), Ill. | 4.8 |
| First of Elgin (A), Ill. | 3.1 |
| First of Chicago | 2.1 |
| Beverly Bank, Ill. | 6.6 |
| Phoenix Mutual, Conn. | 7.3 |
| Security Nat'l Bank, W.V. | 8.2 |
| First of Maryland | 10.0 |
| Calasieu Marine (E), La. | 10.7 |
| Central Bank Monroe, La. | 10.9 |
| First Alabama Bank (I) | 13.0 |
| First Interstate Oklahoma | 13.1 |
| Liberty Nat'l, Ky. | 13.2 |
| Gary Wheaton (Hedged), Ill. | 13.6 |
| First United Trust (G), Ill. | 13.9 |
| Nevada Nat'l | 14.0 |
| American Nat'l (Growth), Ind. | 14.1 |
| Bank of New York | 14.5 |
| Provident Bank, Ohio | 14.7 |
| Sovran Bank (Inst.), Va. | 14.8 |
| Dominion Trust (Corp.), Va. | 14.9 |
| Mutual Service (SA B), Minn. | 15.0 |
| First of Kenosha (CT4001), Wis. | 15.2 |
| Jefferson Trust (Growth), Ill. | 15.2 |
| Crown Life (US group), Ontario | 15.4 |
| Liberty Nat'l, Okla. | 15.5 |
| Wheeling Dollar Bank, W.Va. | 15.6 |
| First Wisconsin (Income) | 15.6 |
| Southeast Bank, Fla. | 16.0 |
| Shawmut Bank, Mass. | 16.0 |
| IAA Trust (C), Ill. | 16.2 |
| Unibanctrust, Ill. | 16.3 |
| Boatmen's Nat'l, Mo. | 16.3 |
| MTrust (Growth), Texas | 16.4 |
| Associated Kellogg, Wis. | 16.4 |
| American Nat'l Bank, Ind. | 16.5 |
| First Illinois (Personal) | 16.6 |
| Citizens Fidelity (E), Ky. | 16.6 |
| C&S Trust Florida | 16.6 |
| Colorado Nat'l | 16.8 |
| First Nat'l Lincoln, Neb. | 17.0 |
| Equibank, Pa. | 17.0 |
| First Illinois (Corp.) | 17.1 |
| First Jersey Nat'l, N.J. | 17.3 |
| Associated Manitowoc, Wis. | 17.4 |
| Central Fidelity, Va. | 17.4 |
| Northern States Trust, Ill. | 17.6 |
| Massachusetts Mutual | 17.7 |
| Connecticut Mutual (CM Select) | 17.8 |
| First Florida Bank | 17.8 |
| Stock Yards (Emp. bene.), Ky. | 17.9 |
| CNA Insurance (SA A), Ill. | 18.0 |
| First of Cincinnati | 18.0 |
| First RepublicBank (Inc.) | 18.0 |
| Mercantile Safe, Md. | 18.1 |
| Wilmington Trust (Total return) | 18.1 |
| Citicorp (Stockshift 100), N.Y. | 18.2 |
| U.S. Nat'l Oregon (Qualivest) | 18.3 |
| Summit Trust, N.J. | 18.3 |
| Bank of Delaware (VIP) | 18.3 |
| U.S. Nat'l of Galveston, Texas | 18.4 |
| First Fidelity Bank, N.J. | 18.4 |
| Fidelity Mgmt. (Inc.), Mass. | 18.4 |
| Bank of Oklahoma, Tulsa | 18.4 |
| Security Pacific (E), Calif. | 18.5 |
| Toledo Trust, Ohio | 18.5 |
| **Standard & Poor's 500** | **22.5** |

### 1-year return

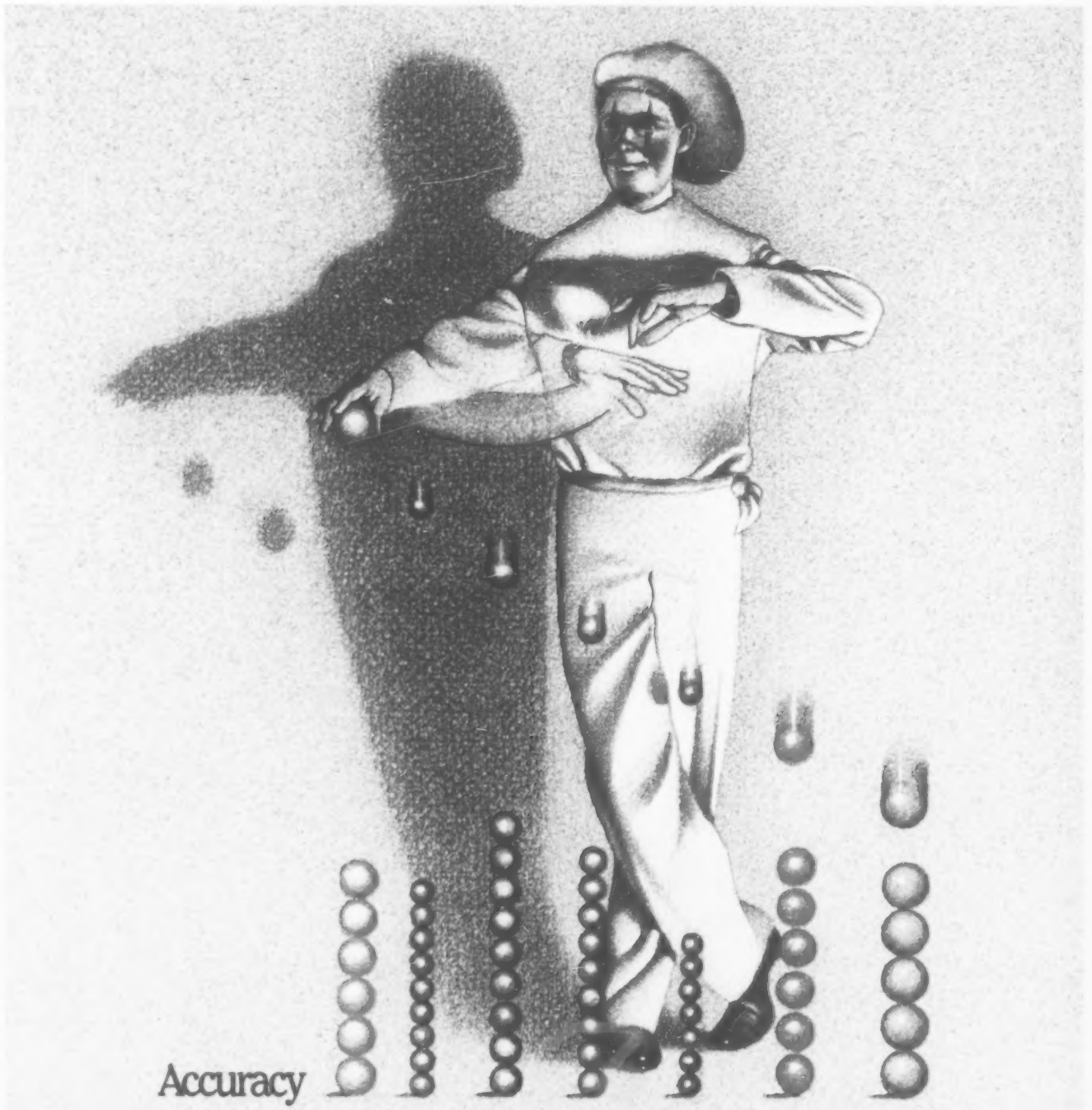
| | % |
|---|---|
| Beverly Bank, Ill. | 22.4 |
| Citizens Heritage (Ciran), Ohio | 20.1 |
| Phoenix Mutual, Conn. | 19.8 |
| First of Chicago | 19.2 |
| MTrust (Growth), Texas | 18.3 |
| Security Pacific (E), Calif. | 18.0 |
| New England Mutual (Growth) | 17.7 |
| Citicorp (Stockshift 200), N.Y. | 17.5 |
| First Fidelity (Disc.), N.J. | 17.1 |
| Sun Bank, Fla. | 16.3 |
| Bank of New York | 15.7 |
| Crown Life (U.S. group), Ontario | 15.0 |
| Summit Trust, N.J. | 14.2 |
| First Alabama, Mobile | 14.1 |
| First Alabama Bank (I) | 13.2 |
| First Illinois (Personal) | 12.5 |
| First Illinois (Corp.) | 12.3 |
| First Interstate Oklahoma | 12.0 |
| Valley Nat'l (I), Ariz. | 12.0 |
| Allied Bank, Texas | 11.8 |
| Bank One, Richmond (C), Ind. | 11.4 |
| First of Elgin (C), Ill. | 11.0 |
| Norstar Trust Co., N.Y. | 10.8 |
| Wheeling Dollar Bank, W.Va. | 10.8 |
| Associated Manitowoc, Wis. | 10.8 |
| First of Elgin (A), Ill. | 10.5 |
| Bessemer Trust, N.Y. | 10.4 |
| Citicorp (Styleshift), N.Y. | 10.3 |
| Mutual of America (SA 2), N.Y. | 10.2 |
| Liberty National, Okla. | 10.2 |
| Citicorp (Stockshift 100), N.Y. | 10.0 |
| First of Maryland | 9.7 |
| IAA Trust Co. (C), Ill. | 9.6 |
| Connecticut Mutual (CM select) | 9.3 |
| IDS Trust (A), Minn. | 9.2 |
| First United Trust (G), Ill. | 9.2 |
| Sovran Bank (Inst.), Va. | 9.2 |
| Wellington Trust (Divers. gro.) | 9.1 |
| South Carolina Nat'l | 9.0 |
| Pioneer Bank, Ill. | 8.9 |
| U.S. Nat'l Oregon (Qualivest) | 8.9 |
| First Nat'l Lincoln, Neb. | 8.8 |
| First City Nat'l Houston | 8.7 |
| Equitable Life (Q-vest 18) | 8.1 |
| First Fidelity Bank, N.J. | 8.0 |
| Central Bank Monroe, La. | 7.8 |
| Confederation Life, Ontario | 7.7 |
| Aetna Life & Casualty, Conn. | 7.7 |
| Dominion Trust (Corp.), Va. | 7.6 |
| Unibanctrust, Ill. | 7.6 |
| Southtrust Bank, Ala. | 7.3 |
| Citizens Fidelity (Trust E), Ky. | 7.3 |
| Jefferson Trust (Growth), Ill. | 7.3 |
| American Nat'l Bank, Tenn. | 7.2 |
| Irving Trust, N.Y. | 7.1 |
| EF Hutton Trust (1), Del. | 7.1 |
| Wilmington Trust (Total return) | 7.1 |
| Boatman's Nat'l, Mo. | 7.0 |
| First RepbulicBank, Texas | 7.0 |
| Frost Nat'l (A), Texas | 6.9 |
| Hawaiian Trust | 6.9 |
| Continental Bancorp, Pa. | 6.8 |
| Philadelphia Nat'l | 6.7 |
| Prudential (VCA-9), N.J. | 6.7 |
| **Standard & Poor's 500** | **5.3** |

### 3-year returns

| | % |
|---|---|
| Sun Bank, Fla. | 31.4 |
| Bank One, Richmond (C), Ind. | 23.9 |
| South Carolina Nat'l | 23.5 |
| New England Mutual (Growth) | 23.3 |
| IDS Trust (A), Minn. | 23.2 |
| Security Pacific (E), Calif. | 22.5 |
| Puget Sound Nat'l, Wash. | 22.1 |
| EF Hutton Trust (2), Del. | 21.4 |
| Mutual of America (SA 2), N.Y. | 21.4 |
| EF Hutton Trust (1), Del. | 21.4 |
| Summit Trust, N.J. | 21.3 |
| Pioneer Bank, Ill. | 21.1 |
| Phoenix Mutual, Conn. | 21.0 |
| MTrust (Growth), Texas | 20.8 |
| Southtrust Bank, Ala. | 20.6 |
| First of Neenah, Wis. | 20.5 |
| First of Neenah, Wis. | 20.5 |
| First RepublicBank (Inc.), Texas | 20.4 |
| Barnett Banks Trust, Fla. | 20.4 |
| First Interstate of Oklahoma | 20.3 |
| Signet Trust, Va. | 20.2 |
| Continental Bancorp, Pa. | 20.2 |
| Mellon Bank, Pa. | 20.2 |
| Cullen Bank, Texas | 20.1 |
| Valley Nat'l (I), Ariz. | 20.1 |
| Morgan Guaranty (Lrg. co.), N.Y. | 19.9 |
| State Street (Matrix synthesis) | 19.7 |
| Citicorp (Indexplus), N.Y. | 19.7 |
| First Fidelity Bank, N.J. | 19.7 |
| First RepublicBank, Texas | 19.7 |
| First of Maryland | 19.6 |
| Bank of New York | 19.6 |
| College Ret. Equities Fund | 19.5 |
| Associated Manitowoc, Wis. | 19.5 |
| Citizens Fidelity (Trust E), Ky. | 19.5 |
| First Kentucky Trust | 19.4 |
| Frost Nat'l (A), Texas | 19.4 |
| Sovran Bank (Inst.), Va. | 19.4 |
| First Illinois (Corp.) | 19.3 |
| First Alabama (I) | 19.2 |
| Dominion Trust (Corp.), Va. | 19.2 |
| Philadelphia Nat'l | 19.1 |
| Morgan Guaranty, N.Y. | 19.1 |
| Liberty Nat'l, Okla. | 19.0 |
| First of Chicago | 19.0 |
| Philadelphia Nat'l | 19.0 |
| Society Nat'l (Rel. value), Ohio | 18.9 |
| First Nat'l Lincoln, Neb. | 18.9 |
| First Illinois (Personal) | 18.8 |
| Nationwide Life, Ohio | 18.7 |
| State Street (Value I), Mass. | 18.7 |
| Hawaiian Trust | 18.7 |
| Allied Bank, Texas | 18.6 |
| First Fidelity (Disc.), N.J. | 18.6 |
| First of America, Mich. | 18.6 |
| Principal Mutual Life, Iowa | 18.5 |
| EF Hutton Trust (A), Del. | 18.5 |
| **Standard & Poor's 500** | **18.1** |

### 5-year returns

| | % |
|---|---|
| Sun Bank, Fla. | 28.4 |
| First RepublicBank, Texas | 19.3 |
| Guardian Ins. (Var. acct.1), N.Y. | 19.2 |
| First Union Bank, N.C. | 19.0 |
| Mellon Bank, Pa. | 18.9 |
| First of America, Mich. | 18.9 |
| First Fidelity (Disc.), N.J. | 18.8 |
| First Interstate of Oregon | 18.8 |
| Cullen Bank, Texas | 18.7 |
| Bank of New England (Valuepath) | 18.5 |
| Frost Nat'l (A), Texas | 18.0 |
| Morgan Guaranty (Lrg. co.), N.Y. | 17.8 |

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## Top equity funds by size

### 1-year returns

#### Over $100 million

| | % |
|---|---|
| First of Chicago | 19.2 |
| MTrust (Growth), Texas | 18.3 |
| Bessemer Trust, N.Y. | 10.4 |
| Citicorp (Styleshift), N.Y. | 10.3 |
| U.S. Nat'l/Oregon (Qualivest) | 8.9 |
| Equitable Life (Q-vest 18), N.Y. | 8.1 |
| Aetna Life & Casualty, Conn. | 7.7 |
| Continental Bancorp, Pa. | 6.8 |
| Philadelphia Nat'l | 6.7 |
| Prudential (VCA-9), N.J. | 6.7 |

#### $50 million to $100 million

| | % |
|---|---|
| Phoenix Mutual, Conn. | 19.4 |
| New England Mutual (Gro.) | 17.7 |
| Bank of New York | 15.7 |
| Norstar Trust, N.Y. | 10.8 |
| IDS Trust (A), Minn. | 9.2 |
| Sovran Bank (Inst.), Va. | 9.2 |
| American Security, D.C. | 6.4 |
| Hibernia Nat'l, La. | 5.9 |
| First Wisconsin Trust (Index) | 5.3 |
| Citicorp (Integrated), N.Y. | 5.2 |
| Society Nat'l (Rel. value), Ohio | 5.2 |

#### $10 million to $50 million

| | % |
|---|---|
| Beverly Bank, Ill. | 22.4 |
| Citizens Heritage (Cliran) | 20.1 |
| Security Pacific (E), Calif. | 18.0 |
| Citicorp (Stockshift 200), N.Y. | 17.5 |
| First Fidelity (Disc.), N.J. | 17.1 |
| Crown Life (U.S. grp.), Ontario | 15.0 |
| Summit Trust Co., N.J. | 14.2 |
| First Alabama, Mobile | 14.1 |
| First Alabama Bank (I) | 13.2 |
| First Illinois (Personal) | 12.5 |

#### Under $10 million

| | % |
|---|---|
| First Illinois (Corp.) | 12.3 |
| Allied Bank, Texas | 11.8 |
| Bank One, Richmond (C), Ind. | 11.4 |
| First of Elgin (C), Ill. | 11.0 |
| Associated Manitowoc, Wis. | 10.8 |
| First of Elgin (A), Ill. | 10.5 |
| First United Trust (G), Ill. | 9.2 |
| Wellington Trust (Divers. gro.) | 9.1 |
| Pioneer Bank, Ill. | 8.9 |
| Unibanctrust, Ill. | 7.6 |

### 10-year returns

#### Over $100 million

| | % |
|---|---|
| First Union Bank, N.C. | 19.1 |
| MTrust (Growth), Texas | 16.5 |
| Bessemer Trust, N.Y. | 18.4 |
| U.S. Nat'l/Oregon (Qualivest) | 18.4 |
| Equitable Life (No.4), N.Y. | 17.9 |
| Philadelphia Nat'l | 17.5 |
| Provident Nat'l, Pa | 17.4 |
| Manufacturers Detroit | 17.4 |
| Continental Bancorp, Pa. | 17.2 |
| American Nat'l Chicago (Act.) | 17.2 |

#### $50 million to $100 million

| | % |
|---|---|
| Manufacturers Life, Ontario | 20.8 |
| New England Mutual (Gro.) | 20.2 |
| Phoenix Mutual, Conn. | 17.0 |
| First Interstate/Oregon | 16.5 |
| Norstar Trust, N.Y. | 16j1 |
| Mercantile Safe, Md. | 15.5 |
| AmSouth, Ala. | 15.2 |
| Sovran Bank (Inst.), Va. | 15.1 |
| New England Mutual, Mass. | 14.9 |
| Society Nat'l (Rel. val.), Ohio | 14.8 |

#### $10 million to $50 million

| | % |
|---|---|
| Guardian Ins. (1), N.Y. | 19.4 |
| First Interstate/Oklahoma | 18.8 |
| Citizens Chillicothe (B), Mo. | 18.7 |
| First Fidelity (Disc.), N.J. | 18.5 |
| Nat'l Bank/Commerce, Neb. | 18.4 |
| Confederation Life, Ontario | 18.1 |
| U.S. Nat'l/Galveston, Texas | 17.5 |
| Lake Shore Nat'l, Ill. | 17.1 |
| Nationwide Life Ins., Ohio | 16.9 |
| C&S Trust Florida | 16.5 |
| First Fidelity Bank, N.J. | 16.5 |

#### Under $10 million

| | % |
|---|---|
| Unibanctrust, Ill. | 15.8 |
| First of Neenah, Wis. | 15.2 |
| Puget Sound Nat'l, Wash. | 14.5 |
| Allied Bank, Texas | 14.2 |
| Associated Manitowoc, Wis. | 14.2 |
| Signet Bank/Maryland (D) | 14.1 |
| Long Island Trust, N.Y. | 13.8 |
| First of Elgin (C), Ill. | 13.6 |
| American Nat'l (Gro.), Ind. | 13.5 |
| Old Second Nat'l, Ill. | 13.2 |

| | | | |
|---|---|---|---|
| Manufacturers Detroit 17.8 | Citizens Fidelity (E), Ky. 16.8 | John Hancock (1L), Mass. 16.4 | Equitable Life (No. 4), N.Y. 17.9 |
| Philadelphia Nat'l 17.6 | Continental Bancorp, Pa. 16.8 | Mercantile Safe, Md. 16.4 | U.S. Nat'l of Galveston, Texas 17.5 |
| Provident Nat'l, Pa. 17.6 | Bankers Trust (Index), N.Y. 16.8 | U.S. Nat'l of Galveston, Texas 16.4 | Philadelphia Nat'l 17.5 |
| American Nat'l Chicago (Active) 17.5 | Fidelity Mgmt. Trust (Inc.), Mass. 16.7 | | Provident Nat'l, Pa. 17.4 |
| LaSalle Nat'l (Intrinsic value), Ill. 17.5 | Citicorp (Indexplus), N.Y. 16.7 | **10-year returns** | Manufacturers Detroit, Mich. 17.4 |
| MTrust (Value), Texas 17.5 | First Alabama, Mobile 16.7 | % | Continental Bancorp, Pa. 17.2 |
| Sovran Bank (Inst.), Va. 17.5 | First of Neenah, Wis. 16.6 | Sun Bank, Fla. 22.1 | American Nat'l Chicago (Active) 17.2 |
| College Ret. Equities Fund 17.5 | Lake Shore Nat'l, Ill. 16.6 | Manufacturers Life, Ontario 20.8 | Lake Shore Nat'l, Ill. 17.1 |
| Principal Mutual Life, Iowa 17.4 | New England Mutual (Growth) 16.6 | New England Mutual (Growth) 20.2 | Principal Mutual Life, Iowa 17.1 |
| First Alabama Bank (I) 17.4 | Colorado Nat'l Bank 16.6 | Guardian Ins. (Var. acct. 1), N.Y. 19.4 | Texas Commerce (Divers.) 17.1 |
| Pioneer Bank, Ill. 17.4 | Barnett Banks Trust, Fla. 16.6 | First Union Bank, N.C. 19.1 | Wheeling Dollar Bank, W.Va. 17.1 |
| Nationwide Life Ins., Ohio 17.3 | Wells Fargo (Index), Calif. 16.6 | First Interstate/Oklahoma 18.8 | Phoenix Mutual, Conn. 17.0 |
| John Hancock (1K), Mass. 17.1 | Chase Investors (CMB index) 16.5 | Citizens Chillicothe (Emp. B), Mo. 18.7 | Nationwide Life Ins., Ohio 16.9 |
| Phoenix Mutual, Conn. 17.0 | American Nat'l Chicago (S&P) 16.5 | First Fidelity (Disc.), N.J. 18.5 | Massachusetts Mutual 16.6 |
| Dominion Trust (Corp.), Va. 17.0 | Signet Trust, Va. 16.5 | MTrust (Growth), N.J. 18.5 | First of America, Mich. 16.6 |
| Mercantile Bank, Mo. 17.0 | **Standard and Poor's 500 16.5** | Bessemer Trust, N.Y. 18.4 | First RepublicBank, Texas 16.6 |
| First Fidelity Bank, N.J. 17.0 | State Street (S&P index), Mass. 16.4 | U.S. Nat'l/Oregon (Qualivest) 18.4 | Nat'l City Cleveland 16.5 |
| First of Chicago 16.9 | C&S Trust Florida 16.4 | Nat'l Bank of Commerce, Neb. 18.4 | C&S Trust Florida 16.5 |
| IDS Trust (A), Minn. 16.9 | Irving Trust, N.Y. 16.4 | Confederation Life, Ontario 18.1 | First Fidelity Bank, N.J. 16.5 |

We've opened up some interest

PIPER

| | |
|---|---|
| First Interstate of Oregon | 16.5 |
| MTrust, Texas | 16.4 |
| Home Life, N.Y. | 16.4 |
| Aetna Life & Casualty, Conn. | 16.3 |
| Employers Life/Wausau (SA 1) | 16.3 |
| First Nat'l Lincoln, Neb. | 16.2 |
| Bank of Tokyo, N.Y. | 16.2 |
| Norstar Trust, N.Y. | 16.1 |
| Signet Trust, Va. | 16.1 |
| Colorado Nat'l Bank | 16.1 |
| First Interstate of Washington | 16.1 |
| Citicorp, N.Y. | 16.0 |
| Equitable Life (Q-vest 18), N.Y. | 15.9 |
| First Variable Life, Ark. | 15.9 |
| **Standard and Poor's 500** | **15.3** |

Master trust. Aug. 22

## Top quartile commingled fixed-income funds

### 3-month returns

| | % |
|---|---|
| Centerre Trust, Mo. | 10.4 |
| Wellington Trust (Long) | 10.1 |
| First RepublicBank, Texas | 8.5 |
| Principal Mutual Life, Iowa | 7.4 |
| Chase Manhattan (Long), N.Y. | 7.2 |
| American Security, D.C. | 7.1 |
| Norstar Trust, N.Y. | 7.0 |
| Wellington Trust (Inter.), Mass. | 6.9 |
| Morgan Guaranty, N.Y. | 6.8 |
| Philadelphia Nat'l | 6.7 |
| IAA Trust (B), Ill. | 6.7 |
| Hamilton Bank, Pa. | 6.7 |
| General American (SA 9), Mo. | 6.6 |
| Wellington Trust (Mtg.), Mass. | 6.5 |
| Philadelphia Nat'l | 6.4 |
| Connecticut Nat'l Bank | 6.4 |
| Commerce Bank-K.C., Mo. | 6.3 |
| Delaware Trust | 6.3 |
| Transamerica Life (SA T-2), Calif. | 6.3 |
| CIGNA Corp. (Active), Conn. | 6.3 |
| First Union Bank (1), N.C. | 6.2 |
| Mercantile Bank, Mo. | 6.2 |
| First of Chicago | 6.1 |
| Nevada Nat'l Bank | 6.1 |
| Connecticut Bank & Trust | 6.1 |
| Midlantic Nat'l, N.J. | 6.1 |
| Bankers Trust (A), N.Y. | 6.1 |
| Confederation Life (Amer.), Ontario | 6.0 |
| Third Nat'l Nashville, Tenn. | 6.0 |
| Hawaiian Trust | 6.0 |
| Travelers (SA P), Conn. | 6.0 |
| Pacific Mutual, Calif. | 6.0 |
| SeaFirst Bank, Wash. | 5.9 |
| Wells Fargo (Index), Calif. | 5.9 |
| Equitable Life (No. 5), N.Y. | 5.9 |
| First of Minneapolis | 5.9 |
| Nat'l Bank of Detroit | 5.9 |
| First Kentucky Trust | 5.9 |
| Connecticut Nat'l (Inter.) | 5.9 |
| First Wachovia Bank, N.C. | 5.8 |
| **Shearson Lehman G/C Index** | **5.8** |
| First Wisconsin Trust (Index) | 5.8 |
| First of Cincinnati (Unrestr.) | 5.8 |
| Mellon Bank, Pa. | 5.8 |
| Manufacturers Life (B), Ontario | 5.7 |
| State Street Bank, Mass. | 5.7 |
| Chase Investors (CMB index), N.Y. | 5.7 |
| Bank IV Wichita, Kan. | 5.7 |
| Provident Nat'l, Pa. | 5.7 |
| First Nat'l of Tulsa, Okla. | 5.7 |
| First Variable Life (H.Q.), Ark. | 5.7 |

## Top fixed funds by size

### 1-year returns

**Over $100 million**

| | % |
|---|---|
| Chase Manhattan (Short-inter.) | 6.3 |
| Equitable Life (No. 5), N.Y. | 5.9 |
| Prudential (VCA 8), N.J. | 5.2 |
| Pacific Mutual, Calif. | 5.1 |
| First Union Bank, N.C. | 4.7 |
| First of Chicago | 4.6 |
| Sovran Bank (Inst.), Va. | 4.5 |
| Chase Manhattan (A), N.Y. | 4.5 |
| Exchange Nat'l Bank, Ill. | 4.4 |
| Morgan Guaranty, N.Y. | 4.2 |

**$50 million to $100 million**

| | % |
|---|---|
| Hawaiian Trust (Defensive) | 8.9 |
| Trustmark Nat'l, Miss. | 8.7 |
| First Union Bank (1), N.C. | 6.4 |
| AmSouth (Ltd. mat.), Ala. | 6.3 |
| Mercantile Safe (Inter.), Md. | 6.3 |
| Texas Commerce (Low vol.) | 5.8 |
| AmeriTrust (Reserve), Ohio | 5.3 |
| Manufacturers Detroit (Inter. H.) | 5.0 |
| Continental Bancorp, Pa. | 4.4 |
| Travelers (SA D), Conn. | 4.2 |

**$10 million to $50 million**

| | % |
|---|---|
| First Alabama, Mobile | 8.8 |
| Wilmington Trust, Del. | 8.5 |
| First of Elgin (D1), Ill. | 6.7 |
| Dauphin Deposit (Short), Pa. | 6.4 |
| Mercantile Safe, Md. | 6.3 |
| Columbus Bank & Trust, Ga. | 6.0 |
| Summit Trust Co., N.J. | 5.9 |
| Mid-State Bancorp, Pa. | 5.6 |
| Valley Fidelity, Tenn. | 5.5 |
| Norstar Trust, N.Y. | 5.4 |
| Mich. Nat'l/Grand Rapids | 5.4 |
| HT Investors, R.I. | 5.4 |

**Under $10 million**

| | % |
|---|---|
| Pacific Financial (Hyr.), Calif. | 7.5 |
| Commerce Union, Tenn. | 6.8 |
| Central Fidelity (Short), Va. | 6.4 |
| First of Neenah (Mtg.), Wis. | 6.3 |
| Signet Bank/Maryland (Short) | 6.1 |
| First of Elgin (D), Ill. | 5.8 |
| Central Fidelity, Va. | 4.5 |
| First Variable Life, Ark. | 4.5 |
| Uribanctrust, Ill. | 4.4 |
| Valley Nat'l (II), Ariz. | 4.4 |

### 10-year returns

**Over $100 million**

| | % |
|---|---|
| Sovran Bank (Inst.), Va. | 12.7 |
| Pacific Mutual, Calif. | 12.1 |
| American Security, D.C. | 12.0 |
| Centerre Trust, Mo. | 11.9 |
| Texas Commerce (Active) | 11.9 |
| Morgan Guaranty, N.Y. | 11.4 |
| Northern Trust (Inter.), Ill. | 11.3 |
| Bank of New England, Mass. | 11.0 |
| John Hancock, Mass. | 10.9 |
| Mercantile Bank, Mo. | 10.7 |

**$50 million to $100 million**

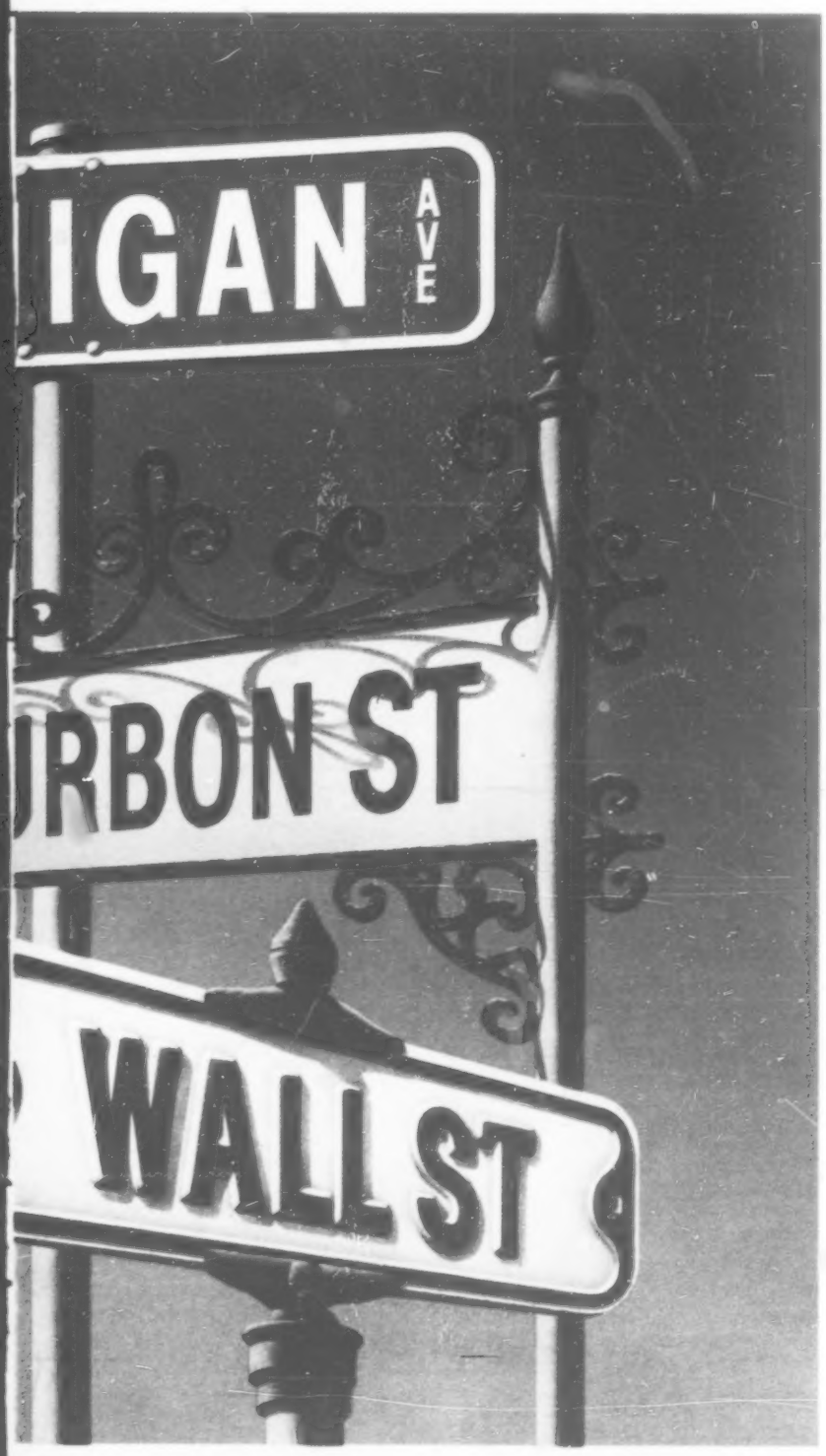
| | % |
|---|---|
| Fidelity Bank, Pa. | 12.1 |
| Hibernia Nat'l, La. | 11.7 |
| First Kentucky Trust (Ret.) | 11.6 |
| Life of Virginia | 11.5 |
| First Jersey Nat'l, N.J. | 11.3 |
| Boatmen's Nat'l, Mo. | 11.1 |
| Manufacturers Detroit | 11.1 |
| AmeriTrust (Reserve), Ohio | 11.1 |
| Bankers Trust (B), N.Y. | 11.0 |
| Bankers Trust (A), N.Y. | 10.8 |

**$10 million to $50 million**

| | % |
|---|---|
| Bank IV Wichita, Kan. | 12.3 |
| SeaFirst Bank, Wash. | 11.9 |
| First Interstate/California | 11.4 |
| First Interstate/Arizona | 11.3 |
| Cullen Bank, Texas | 11.0 |
| Mid-State Bancorp, Pa. | 11.0 |
| American Nat'l Bank, Tenn. | 10.9 |
| First of Maryland | 10.8 |
| IAA Trust (B), Ill. | 10.7 |
| First Bank of Milwaukee | 10.7 |
| Toledo Trust, Ohio | 10.7 |
| First of Neenah (Long), Wis. | 10.7 |

**Under $10 million**

| | % |
|---|---|
| Central Fidelity, Va. | 11.3 |
| Commerce Union, Tenn. | 11.1 |
| Connecticut Nat'l Bank | 10.9 |
| Oregon Bank | 10.5 |
| Key Trust Co., N.Y. | 10.5 |
| First of Neenah (Inter.), Wis. | 10.3 |
| First Nat'l Lincoln, Neb. | 10.1 |
| Greeley Nat'l, Colo. | 10.1 |
| Associated Manitowoc (High) | 9.8 |
| American Nat'l Bank, Ind. | 9.8 |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| | |
|---|---|
| LaSalle Nat'l (Long), Ill. | 5.7 |
| First Fidelity, N.J. | 5.7 |
| First Interstate of Oregon | 5.7 |
| Aetna Life (SA 76), Conn. | 5.6 |
| First of America, Mich. | 5.6 |
| First Interstate/California | 5.6 |
| First Wisconsin Trust (Inter.) | 5.6 |
| Harris Trust, Ill. | 5.6 |
| Bessemer Trust, N.Y. | 5.6 |
| Pacific Inland Bank, Calif. | 5.6 |
| First Trust Co., Minn. | 5.6 |
| Phoenix Mutual, Conn. | 5.6 |

### 1-year returns

| | % |
|---|---|
| Hawaiian Trust (Def.) | 8.9 |
| First Alabama, Mobile | 8.8 |
| Trustmark Nat'l, Miss. | 8.7 |
| Wilmington Trust, Del. | 8.5 |
| Wheeling Dollar Bank, W.Va. | 8.3 |
| Pacific Financial (Hyr.), Calif. | 7.5 |
| Commerce Union, Tenn. | 6.8 |
| First of Elgin (D1), Ill. | 6.7 |
| First Union Bank (1), N.C. | 6.4 |
| Dauphin Deposit (Short), Pa. | 6.4 |
| Central Fidelity Bank (Short), Va. | 6.4 |
| Mercantile Safe, Md. | 6.3 |
| First of Neenah, Wis. (Mtg.) | 6.3 |
| Chase Manhattan (Short-inter.) | 6.3 |
| AmSouth (Ltd. mat.), Ala. | 6.3 |
| Mercantile Safe (Inter.), Md. | 6.3 |
| Signet Bank/Maryland (Short) | 6.1 |
| Columbus Bank, Ga. | 6.0 |
| Summit Trust, N.J. | 5.9 |
| Equitable Life (No. 5), N.Y. | 5.9 |
| First of Elgin (D), Ill. | 5.8 |
| Texas Commerce (Low vol.) | 5.8 |
| Trust Co. of the West (High), Calif. | 5.6 |
| Mid-State Bancorp, Pa. | 5.6 |
| Valley Fidelity, Tenn. | 5.5 |
| Norstar Trust, N.Y. | 5.4 |
| Michigan Nat'l of Grand Rapids | 5.4 |
| HT Investors, R.I. | 5.4 |
| Harris Trust (Gain), Ill. | 5.4 |
| AmeriTrust (Reserve), Ohio | 5.3 |
| Prudential (VCA 8), N.J. | 5.1 |
| Pacific Mutual, Calif. | 5.1 |
| Manufacturers Detroit (Inter. H) | 5.0 |
| First of Maryland | 4.8 |
| Shawmut Bank (Inter.), Mass. | 4.8 |
| Cullen Bank, Texas | 4.8 |
| First Union Bank, N.C. | 4.7 |
| Central Bank Monroe, La. | 4.6 |
| First of Neenah (Long), Wis. | 4.6 |
| First of Chicago | 4.6 |
| Central Fidelity, Va. | 4.6 |
| Sovran Bank (Inst.), Va. | 4.5 |
| Harris Trust, Ill. | 4.5 |
| Chase Manhattan (A), N.Y. | 4.5 |
| Society Nat'l, Ohio | 4.5 |
| First Variable Life, Ark. | 4.5 |
| Associated Kellogg, Wis. | 4.4 |
| Unibanctrust, Ill. | 4.4 |
| Continental Bancorp, Pa. | 4.4 |
| Exchange Nat'l, Ill. | 4.4 |
| Valley Nat'l (II), Ariz. | 4.4 |
| General American (SA 9), Mo. | 4.3 |
| First Wisconsin Trust (Pass. inter.) | 4.3 |
| Morgan Guaranty, N.Y. | 4.2 |
| Travelers (SA D), Conn. | 4.2 |
| Alaska Pacific Trust | 4.2 |
| Nevada Nat'l Bank | 4.2 |
| **Shearson Lehman G/C Index** | **2.3** |

### 3-year returns

| | % |
|---|---|
| Delaware Trust | 17.3 |
| Equitable Life (No. 5), N.Y. | 17.0 |
| Transamerica Life (SA T-2), Calif. | 16.8 |
| Centerre Trust, Mo. | 16.5 |
| Connecticut Nat'l | 15.9 |
| Sunburst Bank, Miss. | 15.7 |
| LaSalle Nat'l (Long), Ill. | 15.4 |
| Principal Mutual Life, Iowa | 15.0 |
| Travelers (SA P), Conn. | 15.0 |
| Manufacturers Life (B), Ontario | 14.9 |
| First Interstate of Arizona | 14.8 |
| IAA Trust (B), Ill. | 14.7 |
| American Security, D.C. | 14.6 |
| Metropolitan Life (SA 41), N.Y. | 14.5 |
| John Hancock, Mass. | 14.4 |
| Fidelity Bank, Pa. | 14.4 |
| Morgan Guaranty, N.Y. | 14.4 |
| Pacific Mutual, Calif. | 14.3 |
| Society Nat'l, Ohio | 14.3 |
| Chase Manhattan (A), N.Y. | 14.3 |
| Norstar Trust, N.Y. | 14.2 |
| First Kentucky Trust (Ret.) | 14.2 |
| Sovran Bank (Inst.), Va. | 14.1 |
| Nat'l Bank of Commerce, Neb. | 14.1 |
| Harris Trust, Ill. | 14.1 |
| Citicorp, N.Y. | 14.1 |
| First RepublicBank, Texas | 14.0 |
| First of Chicago | 14.0 |
| Connecticut Nat'l (Inter.) | 13.9 |
| Bankers Trust (A), N.Y. | 13.8 |
| First Variable Life, Ark. | 13.8 |
| AmSouth, Ala. | 13.8 |
| First Variable Life (H.Q.), Ark. | 13.7 |
| General American (SA 9), Mo. | 13.7 |
| First Wachovia Bank, N.C. | 13.7 |
| Northern Trust, Ill. | 13.6 |
| Beverly Bank, Ill. | 13.6 |
| Colorado Nat'l Bank | 13.6 |
| Bessemer Trust, N.Y. | 13.6 |
| Life of Virginia | 13.5 |
| Aetna Life & Cas. (SA 76), Conn. | 13.5 |
| Continental Illinois | 13.5 |
| First City Nat'l Houston | 13.5 |
| First Alabama, Mobile | 13.5 |
| Liberty Nat'l, Ky. | 13.5 |
| MTrust, Texas | 13.5 |
| CIGNA Corp. (Active), Conn. | 13.4 |
| HT Investors, R.I. | 13.4 |
| Philadelphia Nat'l | 13.4 |
| State Bank & Trust (D), Ohio | 13.4 |
| General American (SA 8), Mo. | 13.3 |
| Phoenix Mutual, Conn. | 13.3 |
| Bank of America, Calif. | 13.3 |
| Wellington Trust (Inter.), Mass. | 13.2 |
| Massachusetts Mutual | 13.2 |
| Shawmut Bank, Mass. | 13.2 |
| Central Fidelity, Va. | 13.2 |
| **Shearson Lehman G/C Index** | **12.8** |

### 5-year returns

| | % |
|---|---|
| Delaware Trust | 16.0 |
| IAA Trust (B), Ill. | 14.6 |
| First Variable Life, Ark. | 14.4 |
| First Alabama, Mobile | 14.3 |
| Equitable Life (No. 5), N.Y. | 13.9 |
| Connecticut Nat'l Bank | 13.9 |
| Life of Virginia | 13.9 |
| Central Fidelity, Va. | 13.8 |
| First Interstate of Arizona | 13.8 |
| Beverly Bank, Ill. | 13.7 |
| Centerre Trust, Mo. | 13.6 |
| Sovran Bank (Inst.), Va. | 13.5 |
| First of Chicago (Dollar) | 13.5 |
| First Variable (H.Q.), Ark. | 13.3 |
| Pacific Mutual, Calif. | 13.3 |
| Morgan Guaranty, N.Y. | 13.3 |
| First Kentucky Trust (Ret.) | 13.3 |
| Sunburst Bank, Miss. | 13.2 |
| John Hancock, Mass. | 13.1 |
| American Security, D.C. | 13.1 |
| Colorado Nat'l Bank | 13.1 |
| First of Chicago | 13.1 |
| First Interstate of California | 13.0 |
| General American (SA 9), Mo. | 13.0 |
| Key Trust Co., N.Y. | 12.9 |
| Citicorp, N.Y. | 12.9 |
| Travelers (SA P), Conn. | 12.7 |
| Society Nat'l, Ohio | 12.7 |
| CIGNA Corp. (Active), Conn. | 12.6 |
| Norstar Trust Co., N.Y. | 12.6 |
| Hamilton Bank, Pa. | 12.6 |
| CIGNA Corp. (Inter.), Conn. | 12.6 |
| Nat'l Bank of Commerce, Neb. | 12.5 |
| Columbus Bank & Trust, Ga. | 12.5 |
| Northern Trust, Ill. | 12.5 |
| Harris Trust, Ill. | 12.5 |
| Philadelphia Nat'l | 12.4 |
| Liberty Nat'l, Ky. | 12.4 |
| Trustmark Nat'l, Miss. | 12.4 |
| Aetna Life & Cas. ((SA 76), Conn. | 12.3 |
| **Shearson Lehman G/C Index** | **12.2** |
| First of Neenah (Mtg.), Wis. | 12.2 |
| Shawmut Bank, Mass. | 12.2 |
| Exchange Nat'l Bank, Ill. | 12.2 |
| State Street Bank, Mass. | 12.2 |
| Manufacturers Detroit | 12.2 |
| AmSouth, Ala. | 12.1 |
| Mellon Bank, Pa. | 12.1 |
| HT Investors, R.I. | 12.1 |
| Travelers (SA D), Conn. | 12.1 |
| Connecticut Nat'l Bank (Inter.) | 12.1 |
| First of Maryland | 12.1 |
| Massachusetts Mutual | 12.1 |
| General American (SA 8), Mo. | 12.1 |

### 10-year returns

| | % |
|---|---|
| Sovran Bank (Inst.), Va. | 12.7 |
| Bank of Wichita, Kan. | 12.3 |
| Beverly Bank, Ill. | 12.1 |
| Pacific Mutual, Calif. | 12.1 |
| Fidelity Bank, Pa. | 12.1 |
| American Security, D.C. | 12.0 |
| Centerre Trust, Mo. | 11.9 |
| SeaFirst Bank, Wash. | 11.9 |
| Texas Commerce (Active) | 11.9 |
| Hibernia Nat'l, La. | 11.7 |
| First Kentucky Trust (Ret.) | 11.6 |
| Life of Virginia | 11.5 |
| First Interstate of California | 11.4 |
| Morgan Guaranty, N.Y. | 11.4 |
| Central Fidelity, Va. | 11.3 |
| First Jersey Nat'l, N.J. | 11.3 |
| Northern Trust (Inter.), Ill. | 11.3 |
| First Interstate of Arizona | 11.3 |
| Commerce Union, Tenn. | 11.1 |
| Boatmen's Nat'l, Mo. | 11.1 |
| Manufacturers Hanover (Gr. tr.) | 11.1 |
| Manufacturers Detroit | 11.1 |


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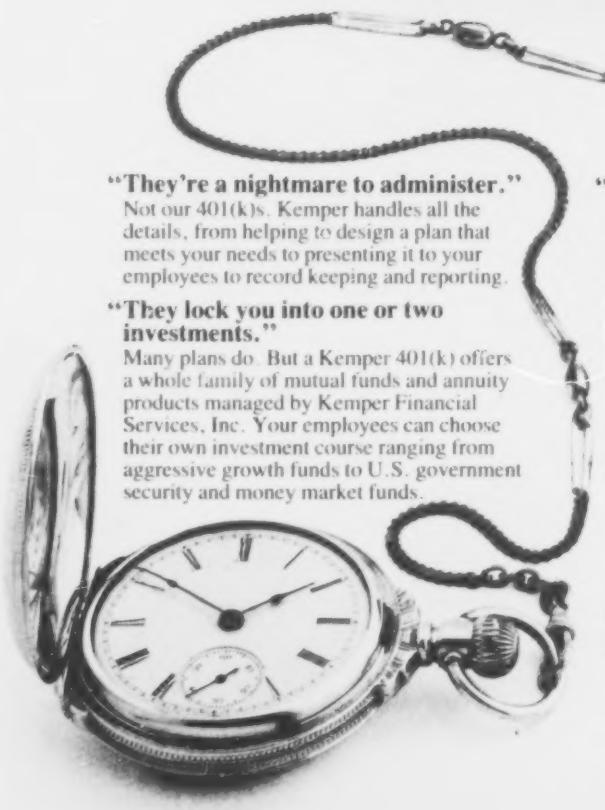

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# Fixed income

*Continued from page 14*

five years, late in 1986, said Charles Murray, trust investment officer. It continued shortening in 1987 — with average maturity of about two years as of Dec. 31 — and finished second for the year, returning 8.8%.

When the bond market shifted in the fourth quarter, the fund did not do well, finishing in the bottom 20% for the quarter with a 2.8% return. Its longer-term performance was better: 13.5%, in the top 30%, for the three-year period; 14.3%, fourth among all funds for five years; and 10%, just above the median, for 10 years.

The $13 million fund is two-thirds in Treasury securities and one-third in corporate bonds, Mr. Murray said.

For the three- and five-year periods, the top finisher was Delaware Trust Co., Wilmington, which focuses on the middle of the maturity range. The fund usually has an average maturity of 10 years, but shortened a bit in 1987, to about eight years as of Dec. 31.

Staying in the intermediate range and exploiting market inefficiencies helped the fund to a 17.3% compound annual return for five years and 16% for three years. The fund was too new for the 10-year period.

The fund, now at $25 million, is about 90% in mortgage-related securities and 10% in municipal bonds, said David Baldt, senior vice president and director of fixed income. Lack of trading opportunities in the mortgage-backed market last spring dampened the fund's 1987 performance, he said. Still, it beat the market and the median in 1987, with 3.4%, and was back in the top 10% for the quarter, with 6.3%.

Tops for the 10-year period was Sovran Bank, Richmond, Va., with 12.7%. Sovran does a moderate amount of interest rate forecasting but tends to stay in the intermediate range of the market, said William Schultz, senior vice president of Sovran Capital Management Corp., the affiliate that runs the fund.

At the end of 1987, the fund's average maturity was eight years, up from five years before the Oct. 19 stock market crash, when its managers correctly anticipated a drop in interest rates, Mr. Schultz said. The fund's return for the year was 4.5%, in the top 20% of the PIPER universe; for the fourth quarter, it was up 5.3%, in the top 40%. It was in the top 10% for the five-year period, with 13.5%, and the top 20% for the three years, with 14.1%.

The fund focuses on investment-grade, high-coupon securities; its $115 million is about 60% in corporates, 25% in mortgage-backed securities and 15% in Treasuries.

Centerre Trust Co., St. Louis, also an interest rate forecaster, topped the quarter's rankings, with 10.4%. It ranked high in all other periods except 1987, when it was third from the bottom, with −3.2%.

Centerre expected the fourth quarter's interest rate drop to come earlier in the year, so was in long bonds, with an average maturity of 22 years, throughout 1987, said Richard Hibbs, senior vice president.

The fund was in the top 10% for the three-, five- and 10-year periods, with returns of 16.5%, 13.6% and 11.9% respectively. Now at $150 million, it is about 60% in Treasury and agency securities, with the rest in corporates and private placements. ■

# Equity returns

*Continued from page 14*

Throughout the year, the fund favored technology, drug and hospital supply company stocks, such as **Apple Computer, Unisys Corp.** and **Johnson & Johnson.**

"Toward the end of the year, we began to believe that secondary growth stocks (such as **Rycoff-Sexton Inc.**) were just plain and simple cheap, and we still believe it."

First Chicago ranked in the top 20% for three-year returns, with 19%, and recorded a five-year return of 16.9%.

"We're very pleased about the longer-term numbers because ... we outperformed the market over five years with a level of volatility 40% less than market," said Gary Brinson, president of First Chicago Investment Advisors.

Throughout the year, the $300 million fund had increased its hedged position from about 20% to 53% by Oct. 19.

The stock-only portion of the fund, was up 6.2% for the period, Mr. Brinson said, and was "stock specific," with the exception of a focus on drug companies. The fund bought **MCI Communications** and **Intel Corp.**, and sold **Santa Fe Southern Pacific Corp.** and **Merck & Co. Inc.**

"We had a larger exposure to smaller stocks than the S&P, but about the same as the Wilshire 5000," Mr. Brinson said.

Steven Gold, vice president and head of marketing at MTrust, said "several gut calls" that kept the fund's equities 7% above the S&P for most of the year and increased cash late in the year brought about its good return. ■

*Continued from page 20*

| | |
|---|---|
| AmeriTrust (Reserve), Ohio | 11.1 |
| Bankers Trust (B), N.Y. | 11.0 |
| Cullen Bank, Texas | 11.0 |
| Bank of New England, Mass. | 11.0 |
| Mid-State Bancorp, Pa. | 11.0 |
| Connecticut Nat'l Bank | 10.9 |
| John Hancock, Mass. | 10.9 |
| American Nat'l Bank, Tenn. | 10.9 |
| Bankers Trust (A), N.Y. | 10.8 |
| First of Maryland | 10.8 |
| IAA Trust (B), Ill. | 10.7 |
| Mercantile Bank, Mo. | 10.7 |
| First Bank Milwaukee | 10.7 |
| Toledo Trust, Ohio | 10.7 |
| First of Neenah (Long), Wis. | 10.7 |
| Citicorp, N.Y. | 10.6 |
| Indiana Nat'l Bank | 10.6 |
| CIGNA Corp. (Active), Conn. | 10.6 |
| Society Nat'l, Ohio | 10.6 |
| Mercantile Safe, Md. | 10.6 |
| First of Chicago | 10.6 |
| CIGNA Corp. (Inter.), Conn. | 10.6 |
| American Nat'l, Minn. | 10.6 |
| **Shearson Lehman G/C Index** | **10.3** |

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FINANCING

# Commercial banks take aim

## Changing regulations open doors to possible new avenues of profit

By Marcia Parker

Commercial banks are fine-tuning their strategies for making inroads into the investment banking business to take advantage of the changed regulatory and competitive environment and to avoid being whiplashed by turbulence in the financial services industry.

Several commercial banks — including Chase Manhattan Bank and Citicorp, both of New York — have reorganized their investment banking operations. Some have taken advantage of opportunities created after some Wall Street investment banks exited certain businesses and laid off people. A few banks — including Citicorp, Security Pacific Corp., Los Angeles, and Manufacturers Hanover Corp., New York — have hired jobless Wall Street investment banking professionals to bolster their staffs.

The banks are polishing their strategies while they face a host of regulatory changes and an uncertain regulatory future, sagging profits from commercial lending, worsening developing-country debt problems and questions about just how lucrative investment banking will be, considering the losses Wall Street firms have piled up recently.

Meantime, it's hard to assess how much investment banking income has contributed to the banks' bottom line, because most don't break out that financial data. The commercial banks' 1987 earnings reports indicated income from fee-producing businesses, which include many investment banking services, rose along with foreign exchange operations.

Because each bank has adopted a different strategy for penetrating the investment banking market, it's tough to compare performance.

While all banks clearly are concentrating more on the higher-risk, higher-reward merchant banking services such as mergers and acquisitions and advisory work, they also are emphasizing historically strong areas such as private placements and risk management. And they are moving more aggressively to capture a piece of the growing securitization market and corporate restructurings.

Some banks — such as Citicorp, Bankers Trust Co. and J.P. Morgan & Co., all of New York — are pursuing global merchant banking, servicing all the financing needs of their customers everywhere. Others like Manufacturers Hanover are carving out large niches to focus on corporate finance and advisory work.

Some money center banks, like Marine Midland Bank, New York, and a few non-money center banks such as Connecticut National Bank, Hartford, First National Bank of Chicago and Continental Illinois National Bank & Trust Co., Chicago, are targeting the middle market, thereby avoiding head-on competition in every line of business with the big Wall Street investment banks.

Chase reorganized its global banking unit, merging its commercial and investment banking operations.

Citicorp also has restructured its investment banking operations. Citicorp Chairman John Reed said the investment banking sector would have to rein in costs. But Michael Callen, who succeeded Thomas Theobold as head of investment banking operations at Citicorp, is aggressively pushing a campaign to broaden the bank's reach into investment banking worldwide.

Roger Widmann, managing director and head of Chemical Bank's U.S. banking business, said Chemical's investment banking revenue jumped to $73 million in 1987 from $5 million in 1984. "That's up-front advisory fees on everything from fairness opinions to restructurings to defensive work we have done for clients," Mr. Widmann said.

Chemical is focusing on business with the large-company market and this year will further tap the middle market it began to target last year, including companies with revenue of less than $250 million. Chemical also will make a major push this year to capture advisory work with companies in the midst of bankruptcy reorganization and to pursue mergers and acquisitions.

Continental Illinois Bank & Trust Co. is among the banks setting their sights on the middle market for investment banking services, hoping to avoid direct across-the-board competition with the big Wall Street investment banks.

Douglas Ebert, Manufacturers Hanover sector executive vice president-the investment banking group, said the bank also is concentrating on large corporations and the middle market, especially for providing corporate finance and advisory services.

"We are not trying to be all things to all people," Mr. Ebert said. "For instance, we chose not to go into big-bang U.K., and we're not building up bond, equity and trading operations."

As of Dec. 1, sector earnings for the year were projected to be about $134 million, compared with $179 million in 1986.

Bankers Trust has been building its corporate finance operation for three years and is widely viewed as having made significant inroads into the investment banking business.

"Our deal flow has never been bigger on a global basis," said David E. Dougherty, managing director and head of the mergers and acquisitions group. "Last year we did 41 deals worth $6 billion. Our fee-income business revenue is growing dramatically, especially private equity and mergers and acquisitions. Our game plan is to compete across the board in every securities market all over the globe," he said.

Outside New York, key commercial banks are concentrating on the middle market, often in their own geographic areas.

*Continued on page 36*

# Players ready to test ruling's limits

By Brad Rudin

NEW YORK — Securities industry officials have good reason to worry about a federal appellate court decision expanding the underwriting powers of commercial banks.

Although the court's decision is limited to mortgage-related securities, commercial paper and a broad range of municipal revenue bonds, the logic of the case could result in powers that go well beyond the products sanctioned in the ruling by the 2nd U.S. Circuit Court of Appeals, New York.

Under the court's ruling last month in Securities Industry Association vs. Board of Governors of the Federal Reserve, commercial banks should be able to underwrite quality corporate securities not specifically mentioned in the case, said Richard V. Fitzgerald, a partner with the Washington law firm of Muldoon, Murphy and Faucette and a former chief counsel to the comptroller of the currency.

The decision upholds the Fed's power to grant expanded underwriting power to the securities subsidiaries of Citicorp, J.P. Morgan & Co. Inc., Bankers Trust New York Corp., Chase Manhattan Corp., Chemical New York Corp., Manufacturers Hanover Corp. and Security Pacific Corp.

"There's a feeling that the possibility exists to go beyond the three securities we got approval for," said L. Thomas Block, senior vice president for government relations at Chemical New York Corp.

"We are going to test the outer limits of what we can do to serve our customers."
— L. Thomas Block
Chemical Bank

The bank's lawyers are seeking ways in which to expand the scope of permissible activities, Mr. Block said. "We at Chemical are going to test the outer limits of what we can do to serve our customers."

Wall Street also finds itself challenged on the legislative front by several bills that would reduce or eliminate the Glass-Steagall Act's restrictions on commercial bank involvement in the securities business.

The Securities Industry Association condemned the decision and said it might ask for review by the Supreme Court.

"It's certainly disappointing to any of us in this industry who were looking for the affirmation of Glass-Steagall," said Robert E. Linton, chairman of Drexel Burnham Lambert Inc., New York.

Because the decision will take effect when the congressional moratorium on expanded securities powers for banks ends March 1, the securities industry finds itself under increased pressure to blunt the commercial banks' latest challenge.

"From the securities industry's standpoint, (the decision) makes it all the more important for us to pursue what we think is an appropriate approach to the problem," said Robert A. Gerard, a managing director at Morgan Stanley & Co. Inc. and spokesman for the SIA on Glass-Steagall matters.

Although not binding on federal judges in other circuits, the decision is important because it shapes the law in New York City, where most major banks have their headquarters.

The core of the court's decision is the interpretation of Glass-Steagall's ban on the affiliation of banks with entities that are "engaged principally" in underwriting and dealing in securities.

In interpreting Section 20 of the act, the court held that bank securities affiliates that underwrite and deal in "bank-eligible" securities — Treasury paper and some municipal bonds — are not deemed to be "engaged principally" in the securities business. Section 20 "only prohibits affiliation with firms that are 'engaged principally' in forbidden investment activity," the court held.

This interpretation means banks can affiliate with securities units so long as the level of activity in the "ineligible" securities remains modest. The court, deferring to the Fed's order, said the dollar volume of "ineligible" underwriting could not exceed 5% of the bank securities unit's gross revenue. Another Fed restriction based on market share was struck down by the court.

Commercial banks are likely to boost their presence in the underwriting business not only by expanding the range of products underwritten, but by trying to increase the existing gross revenue limit, said Mr. Fitzgerald.

"Five percent is a rather modest number and I think that it would grow over time," he said.

Because the court's interpretation of Section 20 offers a powerful vehicle for expanding commercial bank securities powers without congressional consent, some Wall Street executives favor proposed legislation that would close the "principally engaged" loophole. The bill, introduced by Rep. Charles E. Schumer, D-N.Y., would bar bank regulators from using Section 20 to obtain expanded powers for banks.

The bill also would allow commercial banks to underwrite and deal in commercial paper and mortgage-backed securities. ■

# Door opening

*Continued from page 35*

Security Pacific, which has made great strides in building a global merchant banking operation, is taking advantage of the problems on Wall Street to selectively add staff. It hopes to provide financing to companies that lost out when the junk bond market shut down post-Oct. 19, and pursue other areas.

"Our infrastructure is in place. We're in the fine-tuning stage," said Frederick T. Waldek, managing director-Security Pacific merchant banking group.

Michael J. Murray, the vice president in charge of Continental Illinois' investment banking operations, said the bank is aiming at the middle-market corporate customer with $50 million to $500 million in revenue. "Banks have had the most success in companies below the Fortune 100, which Wall Street historically didn't focus on. Then for a while they started to make a push for them. Now they are not," Mr. Murray said. "We have a strong corporate customer base, especially in the Midwest, and we are trying to build on those strong historic relationships."

At Connecticut National Bank, the investment banking group has grown dramatically in recent years and when the pending merger is completed with Shawmut Bank of Boston, it is expected to be a major force in the region.

Joseph F. Savage, managing director-investment banking, said Connecticut National is concentrating on providing investment banking services to middle-market companies with revenue in the $5 million to $50 million range located in the Northeast corridor.

"For a regional bank, the middle market is an area that until recently was not well covered by the investment banks," Mr. Savage said, adding the bank is trying to make more inroads into handling corporate divestitures for these companies and private placements. He said investment banking operations are expected to contribute a seven-figure number to the bottom line in 1988.

Len Caronia, First Chicago senior vice president who heads the financial products group that covers investment banking, has been stepping up activity in all the investment banking areas from mergers and acquisitions to venture capital to private placements. "Our wish list for 1988 includes concentrating on equity related financings," Mr. Caronia said. "It's our view that for the foreseeable future there will be excess capacity in the global debt market." ■

**Trading revenues 1982-1986 ($ millions)**

| | 1982 | 1983 | 1984 | 1985 | 1986 |
|---|---|---|---|---|---|
| Money center banks* Gross income after carry | 394 | 334 | 606 | 694 | 850 |
| Large investment banks Gross income after carry | 692 | 1,228 | 936 | 1,290 | 1,536 |

* Bankers Trust, Chase Manhattan, Chemical Bank, Citicorp & J.P. Morgan

Source: Sanford C. Bernstein & Co.

**1986 commercial bank market shares of selected bank eligible businesses**

| | |
|---|---|
| U.S. government trading | 20% |
| Municipal bonds-general obligation underwriting | 27 |
| Private placements | 19 |
| Private placement of ordinary debt | 26 |
| Swaps | 70 |
| Eurobond underwriting | 10 |

Source: Sanford C. Bernstein & Co.

Michael J. Murray says Continental Illinois will build on strong historic relationships.

# Salomon to open new unit

NEW YORK — Salomon Brothers Inc. plans to establish a money management unit registered under the Investment Advisers Act of 1940 that will invest exclusively in tax-exempt securities.

The new unit, Salomon Brothers Asset Management Co., will begin operations once the Securities and Exchange Commission approves the firm's application.

Martin L. Leibowitz, a managing director in Salomon's fixed-income research group, will serve as a member of the asset management company's board of directors.

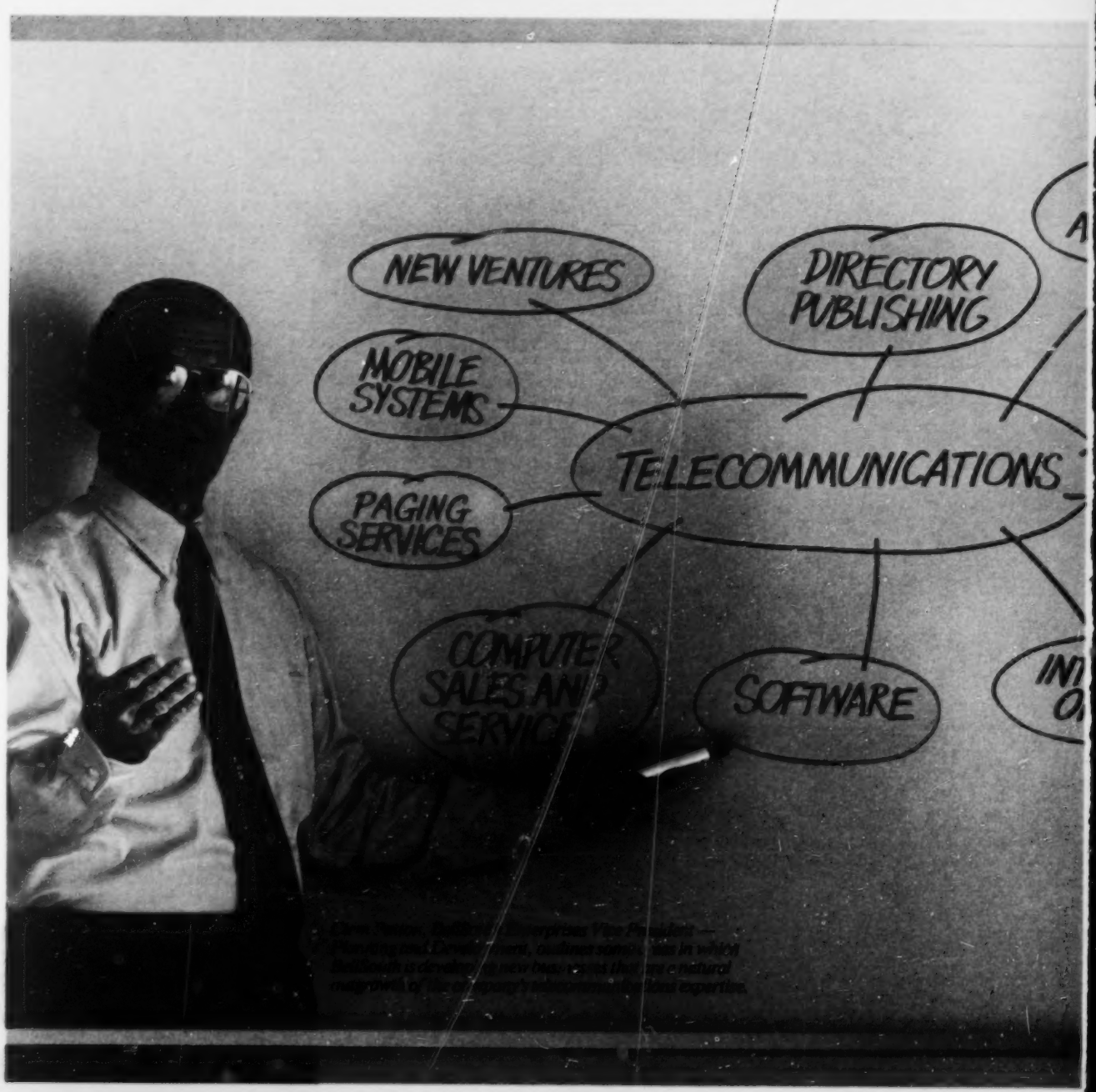
Salomon Brothers Asset Management will sell its services to wealthy individuals, nuclear decommissioning trust funds, insurance companies and corporations seeking short-term investments, said Frederick W. Gaertner, a Salomon vice president. "The type of market we're out to serve hasn't been served very well," he said.

The minimum account size will be $5 million.

Some assets had been managed by the Discretionary Municipal Investments group, which is not registered under the 1940 act, Mr. Gaertner said. The group manages several hundred million in tax-exempt assets, he said. The changed status will give asset management at Salomon a more defined identity, Mr. Gaertner said.

Salomon decided against establishing an institutional tax-exempt money management unit both because the field is crowded and entry into this business would pit the firm against money managers who use Salomon's brokerage services. ■

BellSouth



## Purchases of equities set record

NEW YORK — Despite a third-quarter setback, foreign net purchases of U.S. equities surged to $23.5 billion in the first three quarters of 1987, surpassing 1986's record $18.7 billion by 26%, according to a report by the Securities Industry Association.

Foreign net purchases of U.S. equities in the third quarter slid 42% to $5 billion from $8.6 billion in the second quarter.

As for the fourth quarter, foreign investors did not abandon U.S. equities in October.

Preliminary Treasury data place net purchases at $2.4 billion.

However, preliminary SIA data show large foreign divestitures of $4 billion to $5.5 billion, in November. Thus, the final quarter of 1987 could be the first with foreign net sales of U.S. equities since early 1985, according to the report.

Foreign gross activity in U.S. equities rose to $136.8 billion in the third quarter, and gross transactions in 1987 will be more than $400 billion, compared with a previous record of $277.5 billion in 1985, according to the report.

From the second to the third quarter, foreign investor purchases of corporate bonds changed little, registering about $6.6 billion.

Foreign net purchases of U.S. Treasuries, which to a large extent reflect coordinated central bank intervention in currency markets, subsided to $2.8 billion in the third quarter from $8.6 billion in the second quarter, as the dollar benefited from mainly favorable news.

Among U.S. investors, moderate purchases of European and Canadian stocks and continued large sales of Japanese stocks resulted in net sales of $66 million of foreign stocks in the third quarter.

# 401(k) growth gives boost to GIC managers

By Fred Williams

The leading managers of guaranteed investment contracts — who attracted $17.1 billion in net new business last year — credit much of their growth to the boom in defined contribution plans.

"Defined contribution plans and 401(k) plans continue to move in the GIC area like a Mack truck," said Larry Mylnechuk, senior vice president at Morley Capital Management Inc., Lake Oswego, Ore. Morley Capital attracted $1.07 billion in net new business in the 11 months ended Dec. 1, according to *Pensions & Investment Age*'s Scorecard survey.

GICs have become "extremely important especially to 401(k) plans and other defined contribution plans. The market will continue to grow because employees have made them important. There is no other investment which you are guaranteed a rate like in a GIC," said Win Profio, vice president-marketing at Provident National Assurance Co., Chattanooga, Tenn. Provident ranked fourth in this year's Scorecard, with net new business of $1.5 billion.

Among plans offering GIC funds, 59% of employee contributions were directed to that option, according to a survey published last year by Bankers Trust Co., New York.

According to the survey, 53% of corporate defined contribution plans offer GIC options. Among plans where there is a GIC option, the GIC fund makes up an average of 45% of total assets.

*P&I Age*'s Scorecard measures money management firms' net asset gain in the 11 months ended Dec. 1.

The figures take into account contributions from new and existing clients, client withdrawals and return on investment.

The net new business by the top 10 survey respondents represents contracts written by insurance companies. Because investment managers deal directly with the insurance companies, there might be some double counting in the survey.

Also, most major employee benefit consulting firms manage or place GICs on behalf of their pension clients and were not represented in the survey. For instance, the Dallas office of William M. Mercer-Meidinger-Hansen Asset Planning Inc. added approximately $900 million in new GIC placements for its clients during 1987.

The $17.1 billion recorded by the top 10 GIC managers this past year represents a 10.3% increase from the $15.5 billion net gain by the top 10 during the same period in 1986.

Prudential Asset Management Group, Newark, N.J., was the leader in new GIC business with $4.6 billion, marking the third year the firm has led the pack.

Seven of this year's top 10 are insurance companies; two are investment management firms specializing in management of GIC portfolios; and the third is a specialist unit of a bank.

New to the top 10 list this year are John Hancock Financial Services, Boston, ranking eighth with $1.04 billion in new business; the GIC management division of Bankers Trust Co. — Investment Management Group, ranking ninth with $960 million; and the New York Life Insurance Co., with $923 million.

Bankers Trust entered the GIC management field late in 1986 and now tops $1 billion under management for tax-exempt clients that include ITT Corp. and Hanson Industries.

Jerry Chafkin, vice president and manager-GIC investments at Bankers Trust, said the GIC division expects additional asset growth during 1988 of $900 million to $1 billion.

"The interest is primarily from people who are coming around to the realization that GICs are an investment and that they should look for a manager rather than a consultant or a broker," Mr. Chafkin said.

**Most new GIC business**

| Firm | $ millions |
|---|---|
| Prudential Asset Mgmt. | 4,590 |
| Travelers Cos. | 2,721 |
| Aetna Life Insurance | 1,652 |
| Provident Nat'l Assurance | 1,477 |
| PRIMCO Capital Mgmt. | 1,400 |
| Principal Financial Group | 1,274 |
| Morley Capital Mgmt. | 1,065 |
| John Hancock Financial Services | 1,042 |
| Bankers Trust | 960 |
| New York Life Insurance | 923 |

Investment managers and insurance company officials expect the GIC market to remain attractive in 1988, but with rates and spreads over Treasury instruments remaining volatile.

Despite the security of the investments, the October stock market crash has not resulted in a wholesale flight to GICs from equities.

"Oct. 19 revived interest in using GICs as a strategic tool in the asset allocation process," said Morley's Mr. Mylnechuk.

"Portfolio insurance gave the market a black eye. People realized there are no magic solutions in protecting your returns. But it's how you deploy your assets which makes the difference in the long run."

Morley added eight GIC clients during 1987: Aluminum Co. of America; Cyanamid of Canada; First Wisconsin Trust Co.; International Brotherhood of Electrical Workers; Joint Industry Board of the Electrical Industry; Pacificorp; Payless Drug Stores Northwest; and the Southern California Food and Commercial Workers Union.

PRIMCO Capital Management Inc., Louisville, Ky., the largest independent investment GIC manager, was fifth in terms of net new business with $1.4 billion.

Vernon Hodge, chief investment officer at PRIMCO, said GIC growth has been "fantastic" and has come primarily from a small group of large plans, mainly savings plans.

"Our growth is coming from a few very large plan sponsors with large plans who realize this huge category of assets needs full-time, day-to-day asset management," he said.

PRIMCO added eight GIC clients during 1987: Syntex Corp.; Colgate-Palmolive Co.; Brunswick Corp.; Boettcher Foundation; Cincinnati Bell Inc.; Tyler Corp.; Texas Instruments Inc.; and TWA Pilots Union.

Prudential Asset has gained the most new GIC business for the past two years. One reason is the firm's high profile in the market, another is the movement to higher-quality carriers, said Bruce Vane, vice president and executive director of financial-actuarial services at Prudential Asset Management.

"We aren't afraid to be in the market every day and we also concentrate on the larger contracts," he said. "One thing we have seen recently is that clients are making more distinction between the credit quality of carriers so that those that have higher quality credit ratings are enjoying more interest from the market."

Rounding out the top 10 were The Travelers Cos., Hartford, Conn., with $2.721 billion in net new business; Aetna Life Insurance Co., Hartford, with $1.652 billion; and Principal Financial Group, Des Moines, Iowa, with $1.274 billion.

Some GIC observers noted a capacity problem on the part of insurance carriers last year occurring earlier than the traditional end-of-the-year crunch.

"A lot of carriers seem to be backing away from the market because they don't like the stiff competition. That contraction may continue in 1988," said Mr. Vane.

"We're continuing to see a real problem with capacity," said Mr. Mylnechuk.

"We're seeing a lot more problems earlier in the year. Because of a greater volume of defined contribution money — and in some cases it is more than the carriers can or want to deal with — the demand is too great." ■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PENSIONS & March 7, 1988

# InvestmentAge ®

The newspaper of corporate and institutional investing $4.50 an issue • $90 a year

# 105 clobber S&P return

More than 100 investment management firms beat the Standard & Poor's 500 index by more than 500 basis points last year, despite the market plunge of Oct. 19.

The best performing manager in the *Pensions & Investment Age* survey, Davis, Weaver & Mendel Inc., Atlanta, had a return of 49.2% for the year, compared with 5.3% for the Standard & Poor's 500 index. For three years, the firm returned a compound annual 34.9% vs. the S&P 500's 18.1%.

Moran Asset Management, Greenwich, Conn., ranked second with a return of 34.1% for the year, and 21.4% compounded annually for the three years.

Third was Portfolio Timing Inc., Tacoma, Wash., which had a return of 33.7% for the year and 19.9% for the three years.

Three other firms had returns in excess of 30% for the year: PSM Investors Inc., Carlisle, Mass., 31.5%; Fort Wayne, Ind.-based Lincoln National Pension Insurance Co.'s emerging growth equity fund, 31.4%; and United Capital Management, Denver, 30.3%.

In the survey, mailed to more than 1,500 investment management firms, executives were asked to respond if their firm's equity performance surpassed that of the S&P 500 index by at least 500 basis points. Investment counseling firms were asked to provide a composite return figure for all equity accounts under management for the entire year. A commingled account return was acceptable for banks and insurance companies. (Bank and insurance company special equity accounts are not included, but are reported on page 16.)

Davis, Weaver & Mendel Inc. achieved its high return through market timing. The firm was fully invested until May, when it withdrew for a month, then was fully invested again until September, said Tom Weaver, president.

The firm, which manages about $130 million in tax-exempt assets, also participated in the year-end rally, he said.

**Managers beating the S&P index by 500+ basis points in 1987**

| Manager | 1 yr. | 3 yr. |
|---|---|---|
| Davis, Weaver & Mendel | 49.2% | 34.9% |
| Moran Asset Mgmt. | 34.1 | 21.4 |
| Portfolio Timing | 33.7 | 19.9 |
| PSM investors | 31.5 | 26.4 |
| Lincoln Nat'l Pension (EG) | 31.4 | NA |
| United Capital Mgmt. | 30.3 | 19.8 |

*More statistical information on page 34*

Mr. Weaver said the firm examines market momentum and the relative strength of various components of the market. "It's a very disciplined approach," he said.

Because of the firm's need for liquidity to enable it to move into and out of the market, it invests in large-capitalization stocks for its large clients and uses mutual funds for smaller clients, Mr. Weaver said.

Moran Asset Management's approach combines value and growth, and both parts of the strategy paid off last year.

The firm's search for companies with superior fundamental strengths and that will build value over time led it into stocks that performed strongly last year.

At the same time, its insistence on buying those companies when they are substantially undervalued and selling them when they appear fully or overvalued led it to raise cash before Oct. 19 and to buy again when the market plunge restored values.

Moran was fully invested until July, said Fred Moran, president and chief investment officer, but then executives became concerned about the economy and began to raise cash with the idea of moving to 30% cash. However, the firm was only 15% in cash when the market dropped.

Once the crash had reduced prices to where companies were a good value

*Continued on page 34*

# Proxy system is '88 target

By Marcia Parker

As this year's proxy season draws near, institutional investors are targeting the proxy voting system itself by sponsoring scores of proxy resolutions calling on companies to adopt confidential balloting and give all shareholders equal access to the proxy statements.

Impact of Avon letter assessed — page 2.

At least one first-time activist institutional investor, the $30.8 billion New York City Retirement Systems, is hailing pre-proxy season victories in the form of commitments from Aluminum Co. of America, Pittsburgh, and Minnesota Mining & Manufacturing Co., St. Paul, to voluntarily adopt confidential balloting.

The New York City fund reached agreement last week with those two companies. The pension fund agreed to withdraw its secret-ballot resolutions and the companies agreed to institute secret balloting and independent certification of voting results for this proxy season.

New York City has secret ballot resolutions on the proxies of eight other companies.

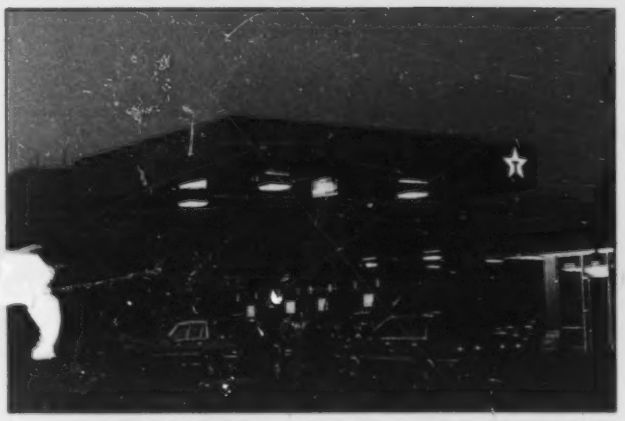
Institutional shareholders, including the New York City fund, also are sponsoring another round of proxy resolutions asking companies to rescind or put to a shareholder vote anti-takeover defenses such as poison pills and greenmail that were enacted without stockholder approval. Last year, institutional shareholder proposals dealing with anti-takeover measures attracted relatively strong support, and sponsors hope to do better this year.

*Continued on page 37*

# New fund activism

## 2 play role in Texaco settlement

By Barry B. Burr



**Public funds from California and Pennsylvania had to fight to become part of the shareholders' panel that was instrumental in Texaco's proposed $3 billion settlement with Pennzoil.**

Two public pension funds are playing an unprecedented and initially unwelcomed role on Texaco Inc.'s equity securities holders committee, which has been instrumental in the proposed $3 billion settlement with Pennzoil Co.

The California Public Employees' Retirement System and the Pennsylvania Public School Employes' Retirement System are non-voting members, the first time any pension fund participated on such a committee, routinely formed to represent shareholders during bankruptcy proceedings.

Their involvement raises pension fund activism to a new height as the institutions seek new ways to assert their power as large shareholders beyond trading their stock or voting proxies. With Texaco, they are directly involved in proposing corporate policy.

"It's absolutely unprecedented," said Abbott A. Leban, the Pennsylvania fund's chief counsel and its representative on the committee. "There has never been a case where a pension fund has been on a bankruptcy committee," except when a corporate fund executive serves on his or her company's own committee.

The two funds' presence on the Texaco equity committee likely will lead to other public fund participation on such committees.

Indeed, the California fund's staff, at the request of the trustees, is drawing up a suggested policy on when the $44 billion fund should seek participation on other committees, said Richard H. Koppes, chief counsel.

"I feel it's a growing area we are keeping our eyes on," added A. Camille Nichols, investment policy coordinator at the Florida State Board of Administration.

Shareholders have until March 21 to vote on the proposed settlement, which has been accepted by Pennzoil. It calls for Texaco to pay

*Continued on page 38*

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## LATE NEWS

### Goldman in bidding for Citicorp

NEW YORK — Goldman, Sachs & Co., New York, and Kemper Financial Services, Chicago, are among the finalists in the bidding for Citicorp Investment Management Inc., according to sources.

It could not be learned whether New York-based Goldman was bidding on the unit for itself or as an agent for another bidder.

If Goldman is seeking to acquire the unit for itself, it would represent a remarkable reversal for the securities firm, which has sought to avoid competing with its money management clients. "We won't comment on pending negotiations," rumors or speculation, said Ed Ryan, a Goldman spokesman.

A Kemper official would only confirm that Kemper is still in the running.

Citicorp is expected to come to a decision rapidly on the sale of its management unit, which has more than $20 billion in domestic discretionary assets under management.

### Bailey leaves Minnesota fund

CHICAGO — Jeffrey V. Bailey has left his job as assistant executive director of the Minnesota State Board of Investment to join Richards & Tierney Inc. starting this week.

As a vice president at the Chicago-based consultant, Mr. Bailey will work in building and maintaining normal, or customized benchmark, portfolios for investment managers.

At the $10 billion Minnesota fund, Mr. Bailey worked with Richards & Tierney, its consultant, to develop 10 normal portfolios to use as benchmarks in its performance-fee based structure for 10 equity managers.

### USF&G acquires stake in Lowry

BALTIMORE — USF&G Financial Services Corp. has acquired a 40% stake in Wm. W. Lowry & Associates Inc., an Atlanta consulting firm.

Terms of the agreement include the conversion of 40% of a note USF&G holds in Lowry into a 40% equity position in the company. The remainder of the note may be converted over time, giving USF&G 100% of the outstanding shares of the firm.

USF&G is a subsidiary of Baltimore-based USF&G Corp. Lowry, which has been the USF&G pension fund's consultant since 1982, now will advise the company on corporate equity investments. Lowry & Associates is consultant to clients representing $10 billion in assets and the holding company for the pension consulting firm Lowry, Raclin, Harrell & Howerdd, Dallas.

Michael T. Wilkinson, USF&G's president, will serve as president and chief executive officer of Lowry & Associates in the Atlanta headquarters.

### 2 shift assets and 1 creates fund

• SAN FRANCISCO — In its first such commitment, the $10 million Mary A. Crocker Trust foundation has hired WorldInvest Ltd., London, to manage a global fixed-income account, according to Richard M. Brooks, president of SFA Management Corp., San Francisco, which administers the trust.

Oechsle International Advisors, Boston, manages international equities for the fund. Assets for the hire came from a terminated equity account, Mr. Brooks said.

• TROY, N.Y. — The $185 million Rensselaer Polytechnic Institute endowment has appointed Irving Trust Co. custodian for $150 million of its assets, according to David Gonino, investment officer. Irving replaces Key Trust Co., Albany.

The balance of the endowment is in perpetual trusts managed by Bankers Trust Co., New York, and Harris Trust and Savings Bank, Chicago.

• HIGHLAND PARK, Mich. — Chrysler Corp. will use First Wisconsin Bank, Milwaukee, as depository for a trust fund to assist workers who will be laid off from Chrysler's Kenosha, Wis., plant.

Chrysler will deposit the net profits from 1988 vehicle sales in Wisconsin in the fund. Chrysler's first deposit was $1.3 million, representing January profits, a spokesman said.

The spokesman had no information on how the money will be invested; a likely possibility is an interest-bearing account that is easily accessible.

## DEPARTMENTS


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Vol. 16, No. 5 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1988.

## Manager questionnaires now out

Questionnaires for *Pensions & Investment Age*'s annual issue profiling the nation's institutional money managers have been mailed out. For your firm to be profiled in the May 23 directory, please return the questionnaire by March 16 to Christine Philip, directory coordinator, *Pensions & Investment Age*, 740 N. Rush St., Chicago, Ill. 60611-2590.

If you have any questions, or have not received a questionnaire, please contact Ms. Philip at (312) 649-5217.

# Proxy pressure warning issued

## Labor Department actions spur hope about process

**By Marcia Parker**

The Department of Labor's letter to Avon Products Inc. on proxy voting procedures and a speech by a high-ranking department official together are expected to have a significant impact on the 1988 proxy season.

The consensus among institutional investors, consultants, proxy solicitors and other players is that corporate executives have been put on notice they can't pressure fiduciaries into voting management's way on issues, and that fiduciaries responsible for casting proxies will make the ultimate economic value of the stock the top consideration.

But they warn unless the Labor Department backs up this long-awaited guidance with aggressive monitoring and enforcement, the advice will be of little help to any of the players struggling to stay out of the gray areas of the nation's complex proxy system.

Some went a step further, arguing that because the department has not offered any formal guidelines, regulations or opinions, few will take the department's views seriously. At least one money manager predicted the directive "will just force this (pressure campaign) underground."

"Anyone concerned with corporate governance and the integrity of the proxy voting system will welcome this statement by the Labor Department and hope that the guidelines will be enforced. The guidelines have been a long time in coming -- it's been 14 years since (the Employee Retirement Income Security Act) was enacted," said Peg O'Hara, director of corporate governance at the Investor Responsibility Research Center Inc., a Washington group that monitors corporate governance and other issues.

"But it should now be crystal clear to everyone that any effort by corporate management to influence or pressure pension plan fiduciaries or their investment managers to vote in any way except solely in the interest of plan participants is in clear violation of the law. With institutions owning an increasing number of shares in many corporations, any guidelines that will protect their right to vote their proxies in their beneficiaries' best interests are to be applauded."

The guidance on proxy policies and procedures has been provided in recent weeks in the form of a letter to Helmuth Fandl, chairman of the Avon retirement board, outlining the role of fiduciaries in proxy voting, and a speech by Assistant Secretary of Labor David Walker. Avon's proxy voting procedures were under investigation. The department has been very careful to clarify it has not issued guidelines, only guidance.

While the Labor Department said its investigation was inconclusive, Alan Lebowitz, the deputy assistant secretary who signed the Avon letter, made it clear the fiduciary act of managing plan assets that are shares of corporate stock includes voting the proxies.

The Labor Department letter said ERISA contains no provision that would relieve an investment manager of fiduciary liability for any decision made at the direction of another person.

It also makes clear the monitoring of the activities of the investment manager with respect to the management of plan assets includes decisions made and actions taken with regard to proxy voting.

And in his speech, Mr. Walker said the ultimate economic value of the stock must be the primary consideration when fiduciaries vote their proxies (*Pensions & Investment Age*, Feb. 22). It was the first time that view had been espoused.

*Continued on page 38*

Photo by Douglas Kenkel

**Dallas-based LTV claimed in court papers filed in New York that restoring three terminated steel unit plans would endanger its reorganization under Chapter 11.**

# LTV disputes agency claim

**By Fred Williams**

Calling PBGC claims "childish and wrong," executives of The LTV Corp., Dallas, said restoration of three terminated steel unit pension plans would have a devastating effect on its reorganization under federal bankruptcy laws.

The Pension Benefit Guaranty Corp. is seeking a summary judgment in U.S. District Court in New York to restore to LTV the plans that were terminated by the PBGC early last year (*Pensions & Investment Age*, Feb. 8).

In its 73-page response, filed Feb. 22, LTV rejected each of the agency's contentions in support of restoration: that LTV's financial condition had improved sufficiently to allow the company to fund the plans; that LTV has abused the pension insurance program by establishing follow-on plans that effectively continue the terminated plans; and, by doing so, LTV has demonstrated a willingness to fund retirement programs at levels comparable to those before termination.

When supporting affidavits are added in, the filing amounts to nearly 1,500 pages.

PBGC officials declined to comment on LTV's filing; the agency had requested an extension in order to prepare its court re-

*Continued on page 35*

# Aetna, CIGNA CIOs resign

**By Marlene Givant**

HARTFORD, Conn. — The chief investment officers of CIGNA Corp. and Aetna Life & Casualty Co. have announced their resignations.

Richard W. Maine, a 24-year CIGNA veteran, resigned to pursue new career opportunities one month after a reorganization of its investment and pension operations. His resignation is effective March 11. Mr. Maine would not comment on his decision.

Donald G. Conrad, chief investment and financial officer of Aetna since 1970, will leave to form some type of investment business with unnamed partners, according to a spokesman. He will leave Aetna in a few months.

Neither man will be replaced.

Under CIGNA's reorganization, management of the investment and the group pension units were combined; the groups remain separate.

Mr. Conrad's duties will be divided between Patrick W. Kenny, senior vice president-finance, and Philip R. Roberts, senior vice president of investments.

During his reign at Aetna, assets under management swelled to $64.9 billion from $8.9 billion.

Commenting on the resignations, Ted Wolff, senior securities analyst with Conning & Co., Hartford, said "I'm not sure how much effect on investment policy one person has."

**Values of publicly held investment managers**

| | Jan. 1 1987 | Peak* | Sept. 19 1987 | Oct. 20 1987 | Dec. 31 1987 | Feb. 29 1988 |
|---|---|---|---|---|---|---|
| Price/revenue ratio | 4.3 | 5.4 | 2.4 | 1.7 | 1.7 | 1.8 |
| Price as % of assets managed | 2.42% | 3.36% | 2.09% | 1.37% | 1.56% | 1.76% |
| Price/earnings ratio | 15.2 | 20.3 | 11.3 | 8.3 | 8.2 | 10 |

* From late February to early March 1987

Source: Berkshire Capital Corp., New York

# Prices fall for advisory firms

## Multiples down 25% for '87 purchases

By Joel Chernoff

NEW YORK — Price multiples paid last year for investment management firms dropped an average of 25% from 1986, even though the vast majority of these acquisitions occurred before the October stock market drop.

Prices to acquire such firms were, on average, 1.8 times revenue and 1.76% of assets under management, down from 4.3 times revenue and 2.42% of assets in 1986, according to a survey by Berkshire Capital Corp., a New York investment banking boutique.

Sixteen public and private transactions involving money management firms were completed in 1987, down slightly from 18 the year before.

The industry faces increased consolidation from competitive pressures, uncertain markets and fee pressures, said Bruce McEver, president of Berkshire. But there will be continued demand for money management firms — particularly from foreign investors — if prices come down to "more reasonable levels" of two to three times revenue, he said.

Some firms were seeking price multiples of at least four to five times revenue before Oct. 19, reflecting the high prices of publicly held firms. At the market peak for publicly held money managers — late February to early March 1987 — stocks traded at an average of 5.4 times revenue, or a 20.3 price-earnings ratio.

By Sept. 19 — a month before the crash — price multiples had declined to 2.4 times revenue or an 11.3 p/e. By Oct. 20, they had dropped to 1.7 times revenue or an 8.3 p/e. As of Feb. 29, they had recovered to 1.8 times revenue or a 10 p/e.

Mr. McEver also predicted banks will continue to sell off their investment management units to raise cash, and might consider selling their personal trust units as well. Earlier this year, Manufacturers Hanover Corp. sold its money management unit to Mitchell Hutchins Asset Management Inc., and Citicorp's investment management subsidiary is on the block.

Future purchases likely will rely on securities because the 1987 tax law makes cash transactions less appealing. Under the previous law, a cash purchaser could write up assets such as client lists and depreciate them over time. Now, those assets are considered goodwill.

Foreign purchasers will step up their buying activity, aided by the weaker dollar and a desire to enter the U.S. pension market, Mr. McEver said. In contrast, "domestic people really have to do it on an economic basis," he explained.

Recently, Zurich-based Bank Julius Baer bought a minority interest in Harbor Capital Management Co. Inc., Boston, while Bank in Liechtenstein AG purchased Trainer, Wortham & Co. Inc., New York. Berkshire Capital was the adviser on the Trainer deal. While British firms have led the buying field, the Japanese companies might become important players shortly, he said.

In 1987, three U.S. money management firms — Reich & Tang Inc., Oppenheimer Capital Corp. and Thomson McKinnon Asset Management Inc. — sold minority interests to the public through master limited partnerships, now greatly restricted by the tax law. A master limited partnership also is expected this year from Alliance Capital Management Corp. All of the firms are based in New York. ■

# Survey finds wide range in earnings

By Carol Wiley

Franklin Resources Inc., San Mateo, Calif., had the largest percentage increase in net earnings — 83.5% — and Criterion Group, Houston, the biggest percentage drop — −54% — among 21 publicly held investment firms reporting earnings for their 1987 fiscal years.

Franklin reported net earnings of $58.9 million on revenue of $206.5 million for its fiscal year ended Sept. 30, up 83.5% from 1986's $32.1 million. The firm has $33 billion under management.

Criterion, with $11.6 billion under management, reported net earnings of $5.7 million on revenue of $42 million, from $12.4 million in 1986.

The data came from a survey by Berkshire Capital Corp., New York.

Berkshire defines net earnings as the company's bottom line — earnings minus taxes and expenses — and information was taken from annual reports and telephone interviews, according to Michael Kuch, financial analyst at Berkshire.

The investment banking boutique also calculated the average stock price of the management firms dropped a 35% last year, compared with the Standard & Poor's 500 stock index's 5.3% gain.

Rupert Johnson Jr., senior vice president at Franklin, attributed the increased earnings to the continued success of the firm's income and investment products.

"While the earnings increase is fine, the sales of mutual funds for all mutual fund companies have done extremely well," Mr. Johnson said.

"Our main concern is the success of our investment products and being able to offer products to meet our clients' needs."

The severe drop in Criterion's earnings, on the other hand, is a result of the poor bond market early in 1987, according to Jeff Nichols, executive vice president-corporate affairs.

"The decrease in earnings was a function of a severe reduction in underwriting income on the mutual fund side," Mr. Nichols said.

He added, however, that management fees for both the private account side and the mutual fund side "were at an all-time record high" for the year.

Franklin was followed by Eaton Vance Corp., Boston, reporting a change of 80.5%, with fiscal '87 net earnings of $11.5 million on revenue of $50.5 million, compared with $6.3 million in 1986. The corporation's fiscal year ended Oct. 31, with $5.4 billion under management.

United Asset Management Corp., Boston, the holding company of 15 investment

*Continued on page 35*

# Managers more malleable on fees

Money management fees are likely to remain flat in 1988, and some consultants and pension executives are finding money managers are becoming more flexible.

Except for bank trust departments, money managers have not raised their fees significantly in the past two years, according to consultants. But a few have adjusted the break points between fee levels to raise the amount at which lower fees start.

And where once a typical manager might have negotiated fees only for accounts of more than $100 million, now negotiation might be possible at $75 million or even $50 million.

In part, the lack of fee increases and greater flexibility reflect the determination of pension executives to hold down costs.

"We have not found any managers increasing their fees in either fixed income or equity," said Paul Berg, chairman of The Plan Sponsor Network, a consulting organization in Port Chester, N.Y.

"We have also found managers are more willing to negotiate fees, particularly on the equity side where performance has been disappointing."

Mr. Berg said that for one consulting client, his firm had negotiated an identical fee schedule with four managers, all of whom otherwise would have had different schedules.

"On the corporate side there has historically been little negotiation of fees," said Mr. Berg. "But corporations are now looking beyond that and are negotiating.

"There are some managers who will not negotiate, but that is becoming a more difficult stance to maintain."

"The last big burst of fee increases was in 1985," said Keith Stransky, vice president at Evaluation Associates Inc., Norwalk, Conn. "Now fees are not going up, although some managers have changed the break points."

One reason for the slowing in the rate of fee increases is that between one-third and one-half of investment counseling firms have fee schedules starting at 1%. "Few are willing to go over 1%," Mr. Stransky said.

Banks are the one area where fees have increased in the past three years, said Dave O'Donovan, vice president at SEI Corp., Chicago. As bank performance has improved, gaps have narrowed between bank fees and those of investment counseling firms, he said.

"They have largely overcome the stigma that used to be attached to bank trust departments," Mr. O'Donovan said.

But even banks probably won't be increasing fees this year, he said.

"Clients want lower fees," said Russ Wilson, a consultant with Collins Associates, Newport Beach, Calif. "We think the best way to get them is through performance fees. We have a plan to get most of our clients on to a performance-fee basis this year."

Mr. Wilson said one Collins Associates client established a maximum fee his fund would pay; one manager who would not agree to that fee was fired.

"This year clients are going to have a lot of leverage," he said, because performance has not been particularly strong.

Reflective of the new mood among pension executives, John E. Bohan, vice president-pension investments at Pillsbury Co., Minneapolis, has specified to new money managers that Pillsbury expects to be charged no more than the lowest fees the managers are charging any other client — public or private — for a fund of the same size. Pillsbury has roughly $733 million in pension assets.

"If they have negotiated a lower fee with someone else, we expect to get the advantage of that lower fee," Mr. Bohan said.

According to data provided by Plan Sponsor Network, the median fee for separate equity man-

*Continued on page 37*

**Fixed-income fees (in dollars and percentage)**

| | Account size ($ mils.) $5 | $10 | $25 | $50 | $100 |
|---|---|---|---|---|---|
| Banks | $20,000/0.4% | $40,000/0.40% | $82,500/0.33% | $145,000/0.29% | $270,000/0.27% |
| Insurance companies | 25,000/0.5 | 50,000/0.50 | 95,000/0.38 | 157,500/0.32 | 232,500/0.23 |
| Investment advisers | 25,000/0.5 | 45,000/0.45 | 90,000/0.36 | 165,000/0.33 | 315,000/0.32 |
| Median all managers | 25,000/0.5 | 40,000/0.40 | 85,000/0.34 | 150,000/0.30 | 250,000/0.25 |

Source: Plan Sponsor Network, Port Chester, N.Y.

**Equity fees (in dollars and percentage)**

| | Account size ($ mils.) $5 | $10 | $25 | $50 | $100 |
|---|---|---|---|---|---|
| Banks | $40,000/0.80% | $60,000/0.60% | $100,000/0.4% | $162,500/0.4% | $287,500/0.29% |
| Insurance companies | 36,400/0.73 | 64,400/0.64 | 148,400/0.59 | 288,000/0.58 | 568,000/0.57 |
| Investment advisers | 37,500/0.75 | 75,000/0.75 | 175,000/0.70 | 290,000/0.58 | 490,000/0.49 |
| Median all managers | 37,500/0.75 | 69,000/0.69 | 130,000/0.52 | 230,000/0.46 | 430,000/0.43 |

Source: Plan Sponsor Network, Port Chester, N.Y.

PIPER

# Texas banks lead special equities

By Carol Wiley

An admittedly "fairly risky" investment approach put First RepublicBank's $17 million select equity fund first for the quarter, one year, three years and five years ended Dec. 31, in Pensions & Investments' Performance Evaluation Report on 104 special equity funds.

First RepublicBank, Dallas, reported stunning returns for the year — 69.5%, compared with the Standard & Poor's 500 stock index return of 5.3% and the PIPER median fund's −1.5%.

For the quarter, the fund had 4.3%, compared with the S&P's −22.5% and the median's −23.9%; for the three years, 45.3% vs. 18.1% and 12.8%; and for the five years, 39.3% compared with 16.5% for the S&P and 12.6% for the PIPER median. All figures for periods of more than a year are compound annualized.

The only period in which the bank did not lead was the 10 years; MTrust Corp., Dallas, reported a compound annualized return of 22.1% on its $22.9 million growth fund for that period. The S&P 500 returned 15.3% for the period, and the PIPER median, 16.6%.

Ben Fischer, senior vice president at First RepublicBank, said the basic investment approach is disciplined and value-oriented.

"About 150 stocks form a pool of value stocks we use," Mr. Fischer said. "From those we cull the most attractive. We are concentrating on 10 stocks or fewer at any one time. Consequently, we put all of our eggs in one basket, and there's high turnover in the basket.

"It's fairly risky, but it's been working pretty well."

Mr. Fischer is not a market-timer, but stocks are bought and sold and bought again within a short period of time because the universe is small and because stocks are sold as soon as the value increases. Stock in **Conrail**, for example, was bought and sold a couple of times last year. Stock in **Banc Paribas** was bought and sold within a month, Mr. Fischer said. Similar trading occurred in **Ashton-Tate Corp., Eastern Gas & Fuel Associates** and **IBM Corp.**

"There was a continual string of trades at the beginning of the year," Mr. Fischer said. "Before the crash, we didn't see as many as we liked so we were above average in cash. We went back into the market Oct. 20 and bought **American Bankers Insurance Group, Bankers Trust Co., Manufacturers Hanover Trust Co., Arvin Industries Inc.** and **Pfizer Inc.**" The fund now is fully invested.

"If there's nothing attractive, we just sit out for a while," he said. "You have to be sure of the market if you have only 10 stocks."

**Special equity pooled funds performance**
**(Periods ended Dec. 31, 1987)**

| | 4th qtr. | 1 yr. | 3 yr. | 5 yr. | 10 yr. |
|---|---|---|---|---|---|
| Highest return | 4.3% | 69.5% | 45.3% | 39.3% | 22.1% |
| First quartile | −20.8 | 3.5 | 17.6 | 14.2 | 18.1 |
| Median | −23.9 | −1.5 | 12.8 | 12.6 | 16.6 |
| Third quartile | −26.1 | −6.6 | 8.7 | 7.5 | 14.9 |
| Lowest return | −33.6 | −18.9 | −0.9 | −3.0 | 12.2 |
| S&P 500 | −22.5 | 5.3 | 18.1 | 16.5 | 15.3 |

For the year, First RepublicBank's fund was followed by the resources fund of Citicorp, New York, with a return of 24.6%; the special equity and Fund 20 funds offered by First Bank National Association of Minneapolis-St. Paul, with respective returns of 15.7% and 15.6%; and the specialty growth fund of Putnam Fiduciary Trust, Boston, with 13.4%.

An oil and gas fund at its inception in 1979, Citicorp's resources fund now seeks stock in asset-rich natural resources companies, em-

*Continued on page 19*


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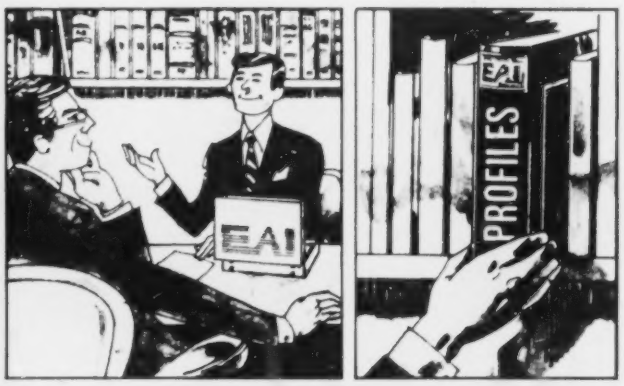


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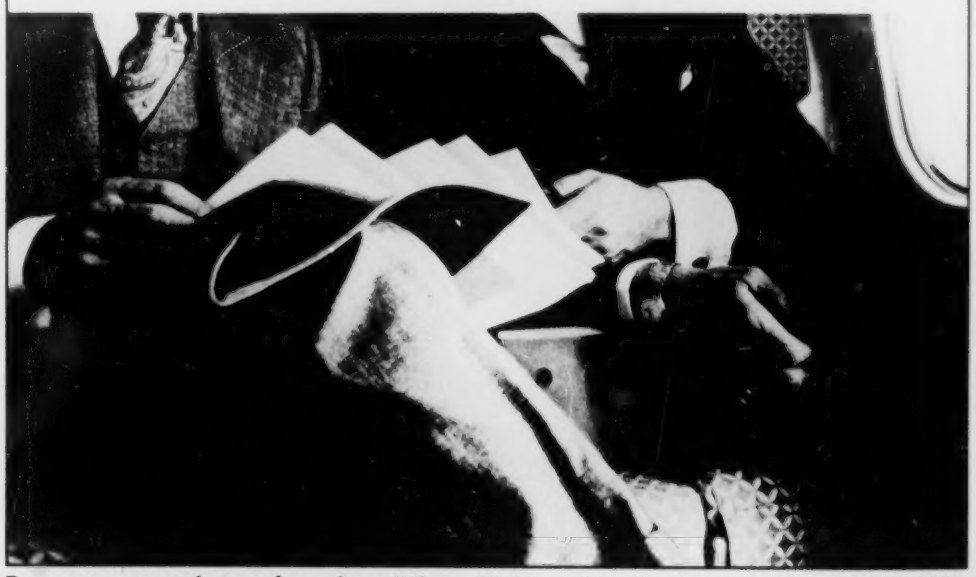

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PIPER

# Bonds shine in international arena

By Joel Chernoff

Global and international fixed-income funds surpassed equity funds in the year and quarter ended Dec. 31, not surprising given the turbulent stock markets of October.

Virtually all of the top-performing funds in the Pensions & Investments' Performance Evaluation Report for the two periods were bond funds, buoyed greatly by the U.S. dollar's decline. PIPER tracks 41 international and global commingled funds of 29 banks and insurance companies.

The Salomon Brothers Non-U.S. Dollar World Government bond index soared 35.2% in dollar terms last year, while Salomon's World Government bond index rose 18.4%. In comparison, the Morgan Stanley Capital International Europe Australia Far East index rose 24.9%, while the firm's World index climbed 16.7%.

"A good part of that 35.2% (non-U.S. bond return) was currency as the dollar declined," said Richard Carr, managing director at First Chicago Investment Advisers, which manages First National Bank of Chicago's $341 million international non-dollar fixed-income fund. The fund was tops for the year with 38.7% and third for the quarter with 23.6%.

First Chicago added 151 basis points by overweighting — at 10% of assets vs. the benchmark's 2% — in Australian dollar bonds until fall, when it sold the entire holding, only to go back in during October.

It also picked up nearly 300 basis points in the Japanese bond market. When interest rates dropped to less than 3% in May, the firm shortened its maturities and trimmed its holdings to 20% from its normal 50%, positioning itself to do well when the bond market collapsed in August and September.

A $207 million foreign bond fund run by PCM International, a subsidiary of Prudential Insurance Co. of America, Newark, N.J., was the second-best international performer for 1987 and the best for the quarter, with respective returns of 37.8% and 25.1%.

PCM slightly overweighted yen-denominated bonds, with a 50% holding, while U.K. gilts also were modestly overweighted at between 15% and 25%.

Meanwhile, combined holdings of 5% to 6% in non-index countries New Zealand and Denmark also boosted returns, said Ken Windheim, director-international fixed income.

PCM also shortened maturities while interest rates were rising, and then went back into longer maturities before rates fell in October.

Coming in third for the year and fourth for the quarter was Toledo Trust Co.'s $1.6 million global bond fund, which is managed by Julius Baer Investment Management Inc., New York. It equaled the non-U.S. benchmark's 35.2% return for the year and vastly outperformed the World index, by switching between deutsche mark and yen bonds and lengthening maturities at the correct time. Its three-month return was 22.6%.

Similarly, fourth-ranked Bank of America's $40 million international bond fund — advised by WorldInvest Ltd., London — achieved 34.9% by switching between those two markets as well as investing in U.K. gilts and French franc bonds, which offered up to 100 basis points over 10-year Treasury securities. In the quarter the fund ranked second, with 24.6%.

On the equity side, the big story again was funds' Japanese weightings. The commitment to Japan plus the commitment to cash going into the drop caused a wide disparity in international equity fund returns for the year, ranging from the 29.1% recorded by Bankers Trust Investment Management Ltd., London, to the −3.5% of Toledo Trust.

Bankers Trust, whose $115 million international equity fund was the only active manager in the universe to beat the EAFE's 24.9% return, attributed its outstanding performance to superior stock selection, specifically in Japan.

In the first quarter of 1987, the manager "detected a little weakness in the yen," and started buying up export-related company stocks, such as **TDK Corp.** and **Mitsubishi Corp.**, said Lynn Minard, director of global marketing and sales. Later in the year, it took profits in those stocks, as well as in Japanese construction, housing, chemical and steel stocks. Bankers Trust still is bullish on Japan, with 43% of the fund's assets invested there.

Index fund managers dominated the rest of the 1987 equity leaders, except for Boston-based Wellington Trust Co.'s Pacific Basin fund, which returned 26.4%.

For the fourth quarter, the strongest stock fund performer was CIGNA Corp.'s $126 million international equity account, largely because of its large cash position.

CIGNA's fund, which takes a top-down approach, started building its cash position in mid-summer, rising to more than 30% by the first week in October, said Sarah Plotkin, product manager.

The risk-averse manager has switched its asset mix radically during the year, starting off with a 6.6% cash position and 45.3% in Japan; by year end, it had 47% in cash and only 12% in Japan.

The fund returned −7.6%, ranked eighth overall, following bond funds.

In the longer periods, equity funds retained their supremacy.

For the three-year period, Fidelity Management Trust's $50 million overseas equity fund was on top, with a 52.9% compound annualized return vs. the EAFE's 49.3% and the World index's 33.2%.

No fund beat the EAFE's 34.9% annualized return for the five years ended Dec. 31. The top performers were index funds run by Wells Fargo Investment Advisors, San Francisco, at 33.5%, and American National, at 33.4%; followed by active managers Bankers Trust, at 32.9%, and Bank of America, at 30.7%. ■

**The statistical data are extracted from Pensions & Investments' Performance Evaluation Report, a quarterly performance evaluation published by *Pensions & Investment Age*. PIPER details comparative performance data on special equity and international funds at more than 70 banks and insurance companies. PIPER is compiled by Rogers, Casey & Barksdale Inc., Stamford, Conn.**


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## Top quartile commingled special equity funds

### 3-month returns

| | % |
|---|---|
| First RepublicBank (Sel.), Texas | 4.3 |
| First of Chicago (Inst.) | -10.1 |
| Citicorp (Real estate), N.Y. | -13.5 |
| Phoenix Mutual (Gro. S), Conn | -14.5 |
| First of Neenah (Regional), Wis. | -14.7 |
| EF Hutton Trust (Gro. B), Del. | -14.7 |
| Central Fidelity (Agg.), Va. | -15.7 |
| Citicorp (Resources), N.Y. | -16.5 |
| First of Neenah (Inc.), Wis. | -17.9 |
| Associated Kellogg (Gro.), Wis. | -18.1 |
| Society Nat'l (Earnings), Ohio | -18.4 |
| First Trust Co., Minn. | -18.9 |
| Old Second Nat'l (HR 10), Ill. | -19.3 |
| Nat'l Bank/Detroit (Int. value F) | -19.5 |
| Bank of New York (A) | -19.5 |
| Putnam Fiduciary (Putnam gro.) | -19.7 |
| First Nat'l of Tulsa (SW gro.) | -20.1 |
| EF Hutton Trust (Emer. B), Del. | -20.3 |
| Nat'l Bank/Detroit (Oppor.) | -20.7 |
| First of Minneapolis (20) | -20.7 |
| Society Nat'l (Ohio reg.), Ohio | -20.8 |
| Bankers Trust (Sup.), N.Y. | -20.8 |
| Mellon Bank, Pa. | -20.8 |
| **Standard & Poor's 500** | **-22.5** |
| **Russell 2000** | **-29.2** |

### 1-year returns

| | % |
|---|---|
| First RepublicBank (Sel.), Texas | 69.5 |
| Citicorp (Resources), N.Y. | 24.6 |
| First Trust, Minn. | 15.7 |
| First of Minneapolis (20) | 15.6 |
| Putnam Fiduciary (Putnam gro.) | 13.4 |
| First Alabama, Mobile (CTF) | 11.4 |
| EF Hutton Trust (Gro. B), Del. | 10.8 |
| Phoenix Mutual (Gro. S), Conn. | 9.45 |
| Bankers Trust (Sup.), N.Y. | 8.3 |
| Morgan Guaranty (Sup. opp.), N.Y. | 8.0 |
| Central Fidelity (Agg.), Va. | 7.7 |
| Pacific Financial (Focus gro.), Calif. | 7.5 |
| First of Chicago (Inst.) | 7.0 |
| Society Nat'l (Earnings), Ohio | 6.8 |
| Security Pacific (Gro. G), Calif. | 6.2 |
| Bank of New York (A) | 5.4 |
| **Standard & Poor's 500** | **5.3** |
| EF Hutton Trust (Emerg. gro. B) | 5.0 |
| Bank of America (Emp. ben.), Calif. | 4.8 |
| LaSalle Nat'l (Small cap.), Ill. | 4.4 |
| EF Hutton Trust (5), Del. | 4.1 |
| Society Nat'l (Ohio reg.), Ohio | 3.9 |
| First of Neenah (Regional), Wis. | 3.5 |
| Harris Trust (Sp. cap.), Ill. | 3.5 |
| **Russell 2000** | **-9.4** |

### 3-year returns

| | % |
|---|---|
| First RepublicBank (Sel.), Texas | 45.3 |
| EF Hutton Trust (Gro. B), Del. | 40.5 |
| EF Hutton Trust (Emerg. B), Del. | 37.3 |
| First of Neenah (Regional), Wis. | 25.5 |
| Security Pacific (Gro. G), Calif. | 23.8 |
| Putnam Fiduciary (Putnam gro.) | 23.1 |
| Society Nat'l (Earnings), Ohio | 21.3 |
| Fidelity Mgmt. (Agg.), Mass. | 21.3 |
| Phoenix Mutual (Gro. S), Conn. | 20.9 |
| Trust Co. of the West | 20.7 |
| Chase Manhattan (Inter. cap.) | 19.3 |
| Manufacturers Hanover (Sup.) | 19.0 |
| Harris Trust (Sp. cap.), Ill. | 18.7 |
| Central Fidelity (Agg.), Va. | 18.4 |
| **Standard & Poor's 500** | **18.1** |
| First of Minneapolis (20) | 17.9 |
| Society Nat'l (Ohio reg.), Ohio | 17.9 |
| First Trust, Minn. | 17.9 |
| Old Second Nat'l (HR 10) | 17.8 |
| Bankers Trust (Sup.), N.Y. | 17.7 |
| Northern Trust, Ill. | 17.7 |
| **Russell 2000** | **7.9** |

### 5-year returns

| | % |
|---|---|
| First RepublicBank (Sel.), Texas | 39.3 |
| Fidelity Mgmt. Trust (Agg.), Mass. | 21.4 |
| Phoenix Mutual (Gro. S), Conn. | 20.4 |
| Trust Co. of the West | 19.9 |
| First of Boston (Yield) | 17.4 |
| Society Nat'l (Ohio reg.), Ohio | 17.2 |
| First Trust Co., Minn. | 16.9 |
| **Standard & Poor's 500** | **16.5** |
| Citicorp (Real estate), N.Y. | 16.3 |
| Manufacturers Hanover (Uncom.) | 16.3 |
| Security Pacific (Gro. G), Calif. | 16.2 |
| Chase Manhattan (Inter. cap.) | 15.5 |
| Manufacturers Hanover (Supple) | 15.3 |
| Citicorp (Sp. sit.), N.Y. | 15.3 |
| First of Minneapolis (20) | 14.7 |
| LaSalle Nat'l (Small cap.), Ill. | 14.5 |
| Connecticut Nat'l (Sup.) | 14.2 |
| Mellon Bank, Pa. | 14.2 |
| **Russell 2000** | **8.5** |

### 10-year returns

| | % |
|---|---|
| MTrust (Growth), Texas | 22.1 |
| First of Maryland | 19.7 |
| First of Alabama, Mobile (CTF) | 19.1 |
| Citicorp (Sp. sit.), N.Y. | 19.0 |
| Manufacturers Hanover (Sup.) | 19.0 |
| Connecticut Bank (Emp. sup.) | 19.0 |
| Chase Manhattan (Inter. cap.) | 18.9 |
| Bank of America (Emp. ltd.), Calif. | 18.6 |
| **Standard & Poor's 500** | **15.3** |

## Commingled International

### 3-month returns

| | % |
|---|---|
| Prudential (Foreign bond), N.J. | 25.1 |
| Bank of America (Fixed), Calif. | 24.6 |
| First of Chicago (Non-$ fixed) | 23.6 |
| Toledo Trust (Global fixed), Ohio | 22.6 |
| Morgan Guaranty (Bond), N.Y. | 20.6 |
| Prudential (Global bond), N.J. | 20.3 |
| Wellington Trust (Bond), Mass. | 18.8 |
| Citicorp (Fixed), N.Y. | 17.5 |
| CIGNA Corp. (Eq.), Conn. | -7.6 |
| Prudential (Foreign stock), N.J. | -9.6 |
| Wells Fargo (Eq.), Calif. | -9.8 |
| Chase Investors (EAFE index) | -10.0 |
| American Nat'l Chicago (Eq.) | -10.2 |
| State Street (Index), Mass. | -10.2 |
| Harris Trust (Eq.), Ill. | -10.2 |
| **MSCI EAFE Index** | **-10.5** |
| First of Chicago (Eq.) | -12.4 |
| Wellington Trust (Pacific Basin) | -12.6 |
| Putnam Fiduciary (Trust) | -13.1 |
| Aetna MIM (Eq.), Conn. | -14.2 |
| Centerre Trust (Coll. W), Mo. | -14.6 |
| Toledo Trust (Eq.), Ohio | -14.7 |
| Chase Manhattan (Global), N.Y. | -14.8 |
| **MSCI World Index** | **-15.5** |
| Bankers Trust (Eq.), N.Y. | -15.8 |
| Morgan Guaranty (Eq.), N.Y. | -16.5 |
| Citicorp (Eq.), N.Y. | -17.0 |
| Bessemer Trust (E), N.Y. | -20.1 |
| Marine Midland (Eq.), N.Y. | -20.8 |
| Fidelity Mgmt. (Overseas eq.) | -21.2 |
| IDS Trust (Coll. eq.), Minn. | -22.3 |
| Prudential (Print eq.), N.Y. | -22.4 |
| Wellington Trust (Stock), Mass. | -23.1 |
| Confederation Life (Stock), Ga. | -23.6 |
| Bank of America (Eq.), Calif. | -24.2 |

### 1-year returns

| | % |
|---|---|
| First of Chicago (Non-$ fixed) | 38.7 |
| Prudential (Foreign bond), N.J. | 37.8 |
| Toledo Trust (Global bond) | 35.2 |
| Bank of America (Fixed), Calif. | 34.9 |
| Wellington Trust (Bond), Mass. | 30.8 |
| Morgan Guaranty (Bond), N.Y. | 30.2 |
| Prudential (Global bond), N.J. | 29.6 |
| Bankers Trust (Eq.), N.Y. | 29.1 |
| Citicorp (Fixed), N.Y. | 27.3 |
| Wells Fargo (Eq.), Calif. | 27.3 |
| Wellington Trust (Pacific Basin) | 26.4 |
| State Street Bank (Index), Mass. | 25.2 |
| **MSCI EAFE Index** | **24.9** |
| Prudential (Foreign stock), N.J. | 24.9 |
| American Nat'l Chicago (Eq.) | 24.8 |
| Chase Investors (EAFE index) | 24.3 |
| CIGNA Corp. (Eq.), Conn. | 20.6 |
| Fidelity Mgmt. (Overseas eq.) | 18.1 |
| First of Chicago (Eq.) | 17.4 |
| **MSCI World Index** | **16.7** |
| Marine Midland (Eq.), N.Y. | 16.5 |
| Confederation Life (Stock), Ga. | 14.7 |
| Chase Manhattan (Global eq.) | 13.2 |
| Putnam Fiduciary (Trust) | 11.3 |
| Aetna MIM (Eq.), Conn. | 11.0 |
| Bessemer Trust (E), N.Y. | 10.1 |
| Prudential (Print eq.), N.J. | 8.2 |
| Centerre Trust (Coll. W), Mo. | 8.0 |
| Citicorp (Eq.), N.Y. | 7.8 |
| Morgan Guaranty (Eq.), N.Y. | 7.3 |
| IDS Trust (Coll. eq.), Minn. | 5.6 |
| Bank of America (Eq.), Calif. | 5.4 |
| Wellington Trust (Stock), Mass. | 4.1 |
| Toledo Trust (Eq.), Ohio | 3.5 |

### 3-year returns

| | % |
|---|---|
| Fidelity Mgmt. (Overseas eq.) | 52.9 |
| Bank of America (Eq.), Calif. | 49.8 |
| American Nat'l Chicago (Eq.) | 49.6 |
| **MSCI EAFE Index** | **49.3** |
| Wells Fargo (Eq.), Calif. | 48.1 |
| Bankers Trust (Eq.), N.Y. | 46.4 |
| Marine Midland (Eq.), N.Y. | 45.4 |
| Bessemer Trust (E), N.Y. | 44.3 |
| Wellington Trust (Pacific Basin) | 43.7 |
| CIGNA Corp. (Eq.), Conn. | 43.6 |
| Chase Manhattan (Global eq.) | 43.6 |
| First of Chicago (Eq.) | 43.1 |
| Citicorp (Eq.), N.Y. | 42.2 |
| Putnam Fiduciary (Trust) | 41.0 |
| Aetna MIM (Eq.), Conn. | 40.5 |

PIPER

# Special equities

*Continued from page 16*

phasizing commodities and precious metals, according to Rich Collins, vice president of Citicorp Investment Management Inc., which manages the $30 million fund.

Those companies include **Royal Dutch Petroleum Co., Atlantic Richfield Co., British Petroleum Co., Alcan Aluminum Ltd., Aluminum Co. of America, Reynolds Metals Co.** and **Amax Inc.**

The fund benefited from takeovers and restructurings at **Standard Oil Co.** and **Texaco Inc.** and has increased its weightings in oil service companies such as **Dresser Industries Inc.** and **Halliburton Co.**

Larry Smith, portfolio manager of the two First Bank National Association funds, said he looks for undervalued stocks and companies with good asset values and good cash flow. The funds have holdings in **North American Philips Corp., Lone Star Technologies Inc.** and **Lukens Inc.**

The Putnam fund holds a core portfolio of small and medium-size rapidly growing companies of high quality. The remainder of the assets are invested in large S&P 500 companies that "do not necessarily have the long-term or future record the others have, but show good growth," according to Matt Weatherbie, managing director and chief investment officer of specialty growth equities.

For the quarter ended Dec. 31, First National Bank of Chicago followed First RepublicBank with a return of −10.1% and Citicorp's real estate stock fund was third with −13.5%. First National Bank of Neenah, Wis., and E.F. Hutton Trust Co., Wilmington, Del., tied for fourth place with returns of −14.7% on their respective regional bank and growth fund B funds.

For the three years, E.F. Hutton Trust followed First RepublicBank with a return of 40.5% on its growth fund B and 37.3% on its emerging growth B; First of Neenah's regional bank fund reported 25.5%; and Security Pacific Corp., San Diego, reported 23.8% on its growth fund G.

For the five years, Fidelity Management Trust Co.'s aggressive equity fund, Boston, ranked second with 21.4%; Trust Co. of the West, Los Angeles, reported a return of 19.9% on its special equity fund; First National Bank of Boston reported 17.4% on its equity yield fund; and Society National Bank, Cleveland, 17.2% on its Ohio regional equity fund.

For the 10 years, MTrust was followed by First National Bank of Maryland's special equity fund, Baltimore, with 19.7%, and First Alabama, Mobile's special stock fund with 19.1%. ■

| | |
|---|---|
| Centerre Trust (Coll. W), Mo. | 40.0 |
| IDS Trust (Coll. eq.), Minn. | 38.1 |
| Morgan Guaranty (Eq.), N.Y. | 37.8 |
| Bank of America (Fixed), Calif. | 37.7 |
| First of Chicago (Non-$ fixed) | 37.2 |
| Wellington Trust (Stock), Mass. | 37.0 |
| Prudential (Global bond), N.J. | 36.8 |
| Prudential (Foreign bond), N.J. | 36.8 |
| Citicorp (Fixed), N.Y. | 33.9 |
| **MSCI World Index** | **33.2** |
| Morgan Guaranty (Bond), N.Y. | 30.7 |
| Toledo Trust (Global bond) | 30.1 |
| Toledo Trust (Eq.), Ohio | 29.0 |
| Wellington Trust (Bond), Mass. | 27.5 |

### 5-year returns

| | % |
|---|---|
| **MSCI EAFE Index** | **34.9** |
| Wells Fargo (Eq.), Calif. | 33.5 |
| American Nat'l Chicago (Eq.) | 33.4 |
| Bankers Trust (Eq.), N.Y. | 32.9 |
| Bank of America (Eq.), Calif. | 30.7 |
| IDS Trust (Coll. eq.), Minn. | 29.6 |
| First of Chicago (Eq.) | 29.3 |
| Centerre Trust (Coll. W), Mo. | 28.4 |
| Citicorp (Eq.), N.Y. | 28.4 |
| Bessemer Trust (E), N.Y. | 27.8 |
| Putnam Fiduciary (Trust) | 27.4 |
| Wellington Trust (Stock), Mass. | 25.9 |
| Morgan Guaranty (Eq.), N.Y. | 25.4 |
| **MSCI World Index** | **25.2** |
| Prudential (Global bond), N.J. | 23.4 |
| Chase Manhattan (Global eq.) | 22.6 |
| First of Chicago (Non-$ fixed) | 21.6 |
| Prudential (Foreign bond), N.J. | 21.4 |
| Bank of America (Fixed), Calif. | 20.8 |
| Citicorp (Fixed), N.Y. | 18.2 |
| Morgan Guaranty (Bond), N.Y. | 18.2 |
| Wellington Trust (Bond), Mass. | 16.3 |

### 10-year returns

| | % |
|---|---|
| **MSCI EAFE Index** | **22.8** |
| First of Chicago (Eq.) | 20.6 |
| Morgan Guaranty (Eq.) | 19.3 |
| **MSCI World Index** | **18.9** |


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# Beat the S&P

*Continued from page 1*

again. Moran recommitted its cash in seven waves until the end of the year, generally buying the stocks it had cut back before Oct. 19.

As an example, Mr. Moran cited **Telecommunication Inc.**, a cable television company the money management firm bought in the midteens and sold before the crash in the high 20s. "After the crash, we bought it back between 17 and 20 and the stock is now at about 26," Mr. Moran said.

Portfolio Timing Inc., as its name implies, is a market-timing manager. It uses a computerized money flow index that tracks institutional money flows into and out of various parts of the market, said Les Cathersal, vice president.

The firm, which has $15.2 million in tax-exempt assets under management, invests in no-load mutual funds, and moves in and out of the market about five times a year, Mr. Cathersal said.

Portfolio Timing became fully invested at the beginning of 1987, got out of the market in spring, got back in in summer and sold out Oct. 7. It then stayed out until Dec. 15 when it re-entered the market and picked up five or six percentage points before the end of the year, Mr. Cathersal said.

PSM Investors, also a market timing firm, manages $340 million in tax-exempt assets by buying into and out of mutual funds based on signals from a timing model that looks at stock market conditions.

According to Stan Lipstadt, chief investment officer, the firm received only one timing signal in 1987, on April 6, and that was a sell signal.

"Either that day, or the day after, the market hit 2,400 on the Dow (Jones industrial average) and then retreated before going up to 2,700," Mr. Lipstadt said. "We sold and were out of the market from April on. We missed everything from then until Oct. 19."

Mr. Lipstadt said his firm is still out of the market, but he expects a buy signal soon.

Lincoln National had two portfolios that beat the S&P 500 by more than 500 basis points — the emerging growth equity fund, which was up 31.4%, and the select equity fund, which was up 13.6%.

The emerging growth fund buys companies with capitalizations of $300 million or less that have earnings growth of more than 20% per year for the previous three years and with price-earnings ratios below the p/e of the industry.

If Lincoln can't find stocks that meet these criteria, it stays in cash. And if a stock no longer satisfies one of the screens, it is sold. As a result of both of these factors, the fund was 70% in cash in July.

However, after Oct. 19 it found good values and reduced its cash position to 50%, said a company official.

Citicorp Investment Management beat the S&P 500 by more than 500 basis points with three commingled and one separately managed tactical asset allocation accounts. The accounts move between stocks and cash, or stocks, bonds and cash, based on nine monetary, value and sentiment indicators.

The best performing account was a $140 million separately managed account run according to the Stockshift 200 strategy, which overlays futures on an index fund to achieve up to a 200% invested position. This account gained 29.6% for the year and has a three-year compound annual return of 31.4%.

The fund started the year 200% invested and dropped to 100% invested by the beginning of September. By Oct. 16 it was 60% invested and went back to 100% invested Oct. 21, finishing the year at 160% invested. It is now 180% invested.

The $40 million commingled account run by the same strategy, but more conservatively, was up 18.4% for the year. It has no three-year record.

Citicorp's Assetshift 50 commingled fund, with $35 million in assets, gained 14.4% for the year. This is a tactical allocation portfolio that varies among stocks, bonds and cash. After starting the year at 75% stocks and 25% bonds, it moved to 40% stocks, 50% bonds and 10% cash Oct. 13 and finished the year at 55% stocks and 45% bonds.

The Stockshift 100 portfolio, which simply moves between stocks and cash, was up 12.5% for the year. It began the year 100% invested and on Sept. 30 it was 80% invested. ■

*This statistical information continued from page 1...*

## Managers beating the S&P 500 index by 500 basis points (1987)

| Manager | 1 yr. | Manager | 1 yr. |
|---|---|---|---|
| Citicorp (Stockshift 200) | 29.6 | JMC Capital Mgmt. | 13.2 |
| Amerindo U.S. Advisors | 29.3 | Sanford C. Bernstein | 13.2 |
| Institutional Capital | 28.7 | Investors Research | 13.1 |
| Becker Williams | 28.0 | Security Pacific Investment | 12.8 |
| J.H. Ayers | 26.6 | Brundage Story & Rose | 12.7 |
| Capital Technology | 25.7 | James Investment Research | 12.6 |
| Buffalo Capital | 25.5 | R. Meeder & Associates | 12.6 |
| R.M. Leary | 24.6 | Citicorp (Stockshift 100) | 12.5 |
| Jundt Capen (emerging) | 24.3 | Simpson Capital Mgmt. | 12.5 |
| Avatar Associates | 23.0 | Crabbe-Huson | 12.4 |
| Pension Mgmt. | 23.0 | First Illinois | 12.3 |
| Schield Mgmt. | 22.6 | investment Advisers, Mpls. | 12.3 |
| Beverly Bank | 22.4 | T.A.L. Investment Counsel | 12.3 |
| Harris Bretall Sullivan | 21.1 | Renaissance Investment | 12.2 |
| Guildcor Financial | 21.0 | AIM Capital Mgmt. | 12.1 |
| BancOklahoma Trust | 20.5 | Front Street Capital Mgmt. | 12.1 |
| Citizens Heritage Bank | 20.1 | John McStay Investment | 12.1 |
| Phoenix Mutual | 19.8 | Commercial Nat'l, Shreveport | 12.0 |
| Leseene | 19.6 | First Interstate, Okla. | 12.0 |
| Jundt Capen (core) | 19.3 | First Investment Mgmt. | 12.0 |
| First Chicago Investment | 19.2 | Valley Nat'l Bank | 12.0 |
| First Fidelity Bank, N.J. | 18.6 | Heartland Capital Mgmt. | 11.9 |
| MSecurities | 18.4 | Allied Bank, Texas | 11.8 |
| MTrust (growth) | 18.3 | Montag & Caldwell | 11.6 |
| Webster Capital Mgmt. | 18.2 | Burgess Capital | 11.5 |
| Fiduciary Mgmt. Associates | 18.0 | Bank One, Richmond Ind. | 11.4 |
| Sec. Pacific Investment (E) | 18.0 | Dreyfus | 11.4 |
| New England Mutual (growth) | 17.7 | Hellman, Jordan Mgmt. | 11.3 |
| Capital Growth Mgmt. | 17.1 | Hutchinson Nat'l Bank | 11.1 |
| T. Rowe Price (NRIS) | 16.9 | La Sauve Garde | 11.1 |
| Beacon Capital Mgmt. | 16.7 | First of Elgin, Ill. (C) | 11.0 |
| Sun Bank Investment Mgmt. | 16.3 | United Missouri | 11.0 |
| Cashman Farrell | 15.9 | Astrop Advisory | 10.9 |
| Bank of New York | 15.7 | Investment Advisors, Houston | 10.9 |
| Amalgamated Trust | 15.1 | Kennedy Capital Mgmt. | 10.9 |
| Crown Life | 15.0 | Lincoln Capital Mgmt. | 10.9 |
| Cash Flow Investors | 14.5 | Associated Manitowoc | 10.8 |
| NM Rothschild | 14.5 | Norstar Trust | 10.8 |
| Sirach/Flinn Elvins | 14.5 | Wheeling Dollar Bank | 10.8 |
| Citicorp (Assetshift 50) | 14.4 | Buttonwood Capital Mgmt. | 10.7 |
| Olympic Capital Mgmt. | 14.4 | Marsh & Cunningham | 10.7 |
| Argus Investors Counsel | 14.3 | RCM Capital Mgmt. | 10.7 |
| Summit Trust | 14.2 | NCNB Nat'l Bank | 10.6 |
| T. Rowe Price (CAIS) | 14.2 | First of Elgin, Ill. (A) | 10.5 |
| First Alabama, Mobile | 14.1 | Manning & Napier | 10.5 |
| R.B. Haave | 13.8 | Bessemer Trust | 10.4 |
| Lincoln Nat'l Pension (SE) | 13.6 | GAMCO Investors | 10.4 |
| Longfellow Investment Mgmt. | 13.5 | Investors Research | 10.4 |
| First Alabama Bank | 13.2 | Meridien Mgmt. | 10.4 |
| Interinvest | 13.2 | S&P 500 | 5.3 |

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PENSIONS & Investment Age

March 21, 1988

The newspaper of corporate and institutional investing

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C2710-2
3/22/88

# S&P issues expand lead

## Beat others by 600 points

By Joel Chernoff

Stocks in the Standard & Poor's 500 index boosted their performance over similar non-S&P stocks last year, beating them by six percentage points.

More than one-third of the difference occurred during the fourth quarter alone, showing that the phenomenon — which started in 1980 — actually increased during the market crash.

"What happened during the crash is that S&P stocks corrected less than non-S&P stocks," said William Jacques, chief investment officer of Martingale Asset Management, Boston. Martingale and BARRA, a Berkeley, Calif.-based consulting firm, analyzed the S&P data.

The advantage of being included in the S&P 500 is drawing increasing attention from investment experts and pension executives. If the phenomenon continues, the implications are enormous for investors, issuers and financial markets alike.

But some are not convinced. "I don't think there's any content to these kind of results," said Steve Ross, principal in Roll and Ross Asset Management and Sterling Professor of Economics and Finance at Yale University. He said one would have to wait more than 20 years to see if the phenomenon is more than "a ghost" in the data.

The issue is separate from the debate on the merits of investing in small-capitalization vs. large-cap stocks. Many pension executives are pondering whether smaller-cap stocks are set for a rebound after a lackluster performance during the bull market, and whether their equity portfolios contain enough small-cap stocks from an asset allocation perspective.

Rather, this issue focuses on whether inclusion in the S&P will cause a difference in performance for stocks of equivalent capitalization.

In earlier research, BARRA and Martingale found S&P stocks beat their counterparts by an average of 3.25 percentage points a year in the 7½ years ended June 30. That gap has widened to 4 percentage points a year with the inclusion of the full-year 1987 data, according to Mr. Jacques.

Investment experts have attributed the difference to the growth in indexed stock funds, development of index futures and their use in program trading strategies, and more recent inflows of funds from foreign investors, particularly the Japanese, who tend to focus on the best-known stocks (*Pensions & Investment Age*, Sept. 7).

Since then, additional research and developments have emerged:

- The "membership anomaly" also pertains to foreign markets. Membership in the Morgan Stanley Capital International index in Japan made for a difference of 25 basis points per month in the 6½-year period ended June 30, according to BARRA.

"It appears the most likely cause for this phenomenon has been the increased international investment by U.S. institutional investors," according to a BARRA newsletter.

*Continued on page 50*

# ESOP notes enrich Enron

## $95 million to prepay bank loan

By Brad Rudin

HOUSTON — Enron Corp. has sold a $95 million issue of securitized employee stock ownership plan notes in a private placement that enables the energy company to prepay a bank loan used to finance the ESOP's purchase of Enron common stock in 1986.

Securitized ESOP notes are high-quality, floating-rate instruments sold to banks and other financial institutions that enable ESOP plan sponsors to refinance loans used to purchase the stock (*Pensions & Investment Age*, Dec. 14).

The Enron ESOP owns about 20% of the company's common stock. In 1986, the ESOP borrowed $335 million to buy 8.7 million shares. All but $95 million had been repaid prior to the notes' issue, said Mark Koenig, director of pension investments at Enron.

The securitized ESOP notes, due June 30, 1993, were placed last month by Bankers Trust Co., New York, which also serves as remarketing agent and trustee.

Bankers Trust calls its securitized ESOP notes FRESOPS, or floating-rate ESOP

*Continued on page 50*

Houston-based Enron Corp. saved between 25 and 50 basis points by refinancing a bank loan with a $95 million private placement of securitized employee stock ownership plan notes.

INSIDE

## PROPERTY supplement in this issue

The marriage of corporate finance and real estate, disparity in manager fees and syndication problems of the Japanese are among issues examined in the

PROPERTY

Corporate deals driven by realty

Pension fund is new player in securities

vary by 388%

# Mortgage woes grow

## Insurers plagued by non-performing loans

By Fred Williams and John Covaleski

Non-performing mortgages held by insurance companies nearly tripled in two years, and those held by The Travelers Corp., Hartford, Conn., are almost triple the industry average.

Because mortgages back many of the guaranteed investment contracts purchased by institutional investors, analysts and industry insiders say investors should concentrate not just on returns, but on the underlying investments made to attain the returns.

Non-performing mortgages among 21 carriers climbed to 3.23% of the insurers' total mortgage portfolios as of Dec. 31, vs. 1.16% as of Dec. 31, 1985, according to the American Council of Life Insurance, Washington, in part because of heavy concentration in the Energy Belt. At Travelers, non-performing mortgages hit 10% as of Dec. 31, according to a report by First Boston Corp., New York.

(Non-performing mortgages are 60 days or more past due on non-agricultural loans, and at least 90 days past due on agricultural loans.)

By comparison, Mutual Life Insurance Co. of New York, New York, reported 2% of its $4.2 billion mortgage portfolio was non-performing at year end, and Phoenix Mutual Life

*Continued on page 50*

## LATE NEWS

### Executives change positions

Axel H. Swanson III, vice president and treasurer at National Gypsum Co., Dallas, will retire March 31 after 30 years at the company. He will be replaced by Paul T. Even, assistant treasurer. Mr. Even joined National Gypsum in 1971 and has also served as manager-cash and investments and as audit manager. He also is president of the National Corporate Cash Management Association.

In Olympia, Wash., David Weig has been named acting director of the $13 billion Washington State Investment Board. He fills in for outgoing executive director, John A. Hitchman, who is resigning effective March 31. Mr. Weig, who was Mr. Hitchman's deputy director, said a search is under way for a permanent replacement, with resumes being accepted until April 15. "I am considering putting my name in for the permanent job," he said.

### Mitsui, Scudder sign agreement

NEW YORK — The Mitsui Trust & Banking Co. Ltd., Tokyo, and Scudder, Stevens & Clark Inc., New York, will embark on a long-term cooperation agreement. The two firms will exchange trainees and hold semiannual formal investment discussions in New York or Tokyo.

Mitsui will assist Scudder in marketing in Japan and explain the workings of specified money trusts, or "tokkin." Scudder, which manages $36 billion in assets, will further Mitsui's understanding of the organization and operation of U.S. investment companies and develop the firm's U.S. equity and fixed-income capabilities.

### Cabot joins NYSE pension panel

NEW YORK — Walter M. Cabot, president of Harvard Management Co., Boston, has been appointed to the New York Stock Exchange's pension managers advisory committee, rounding out the 20-member panel. The other 19 members were named last month. Its first meeting is March 24.

### Presbyterian fund shifts assets

PHILADELPHIA — The Board of Pensions of the Presbyterian Church (U.S.A.), with $1.9 billion in pension assets has terminated one manager and moved some money around temporarily until new specialty managers are hired, according to Wm. Irwin Arbuckle II, vice president-investments and treasurer.

Mr. Arbuckle said the board had terminated a $45 million aggressive growth account with Fred Alger Management Inc., New York, and moved the money temporarily to an extended market index account with Wells Fargo Investment Advisors, San Francisco.

He said the move was spurred by the board's desire to shift strategies to a small-cap portfolio. "Alger was an excellent aggressive growth manager. We felt the life cycle of that style was over for us and it was time to make a change."

Callan Associates, San Francisco; Debatin & Associates, Atlanta; Cambridge Associates, Boston, and Mellon Measurement Service are consultants.

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### Funds skip strategy — P. 41

Futures arbitrage took a bad rap in the October market crash, and although old customers are remaining steadfastly loyal to the strategy, the figurative black eye it now sports seems to be scaring away potential clients.

### World markets update — P. 17

Although institutional investors have dominated the world's markets during the 1980s, some investors wonder whether the crash of 1987 might have been a deathblow to global investing. *Pensions & Investment Age* takes a look at this and other issues.


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Vol. 16, No. 6 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1988.

## Adviser questionnaires overdue

The deadline has passed for submission of questionnaires for *Pensions & Investment Age*'s annual money manager directory.

The issue, profiling the nation's institutional money managers, will be published May 23.

If you have any questions or have not returned your questionnaire, please contact Christine Philip, directory coordinator, *Pensions & Investment Age*, 740 N. Rush St., Chicago, Ill. 60611-2590. You may call Ms. Philip at (312) 649-5217.

# Institutional investors are study's focus

## Corporate role scrutinized

By Marcia Parker

NEW YORK — Columbia University has begun a major long-term effort to explore the role of the institutional investor in large publicly owned corporations.

The project, based at the university's Center for Law and Economic Studies, is getting off the drawing board at a time when institutional investors — the biggest stockholders in companies — are wrestling with what role they want to play in corporate America.

Once passive stockholders, institutions have in recent years become activist stakeholders, anxious to make sure management hears their views and feels accountable. But these investors have not yet defined how they wish to translate ownership into action.

The co-founders of the center — Ira Millstein, a senior partner at Weil, Gotshal & Manges, a New York law firm, and Louis Lowenstein, Columbia University Law School professor — cite several other pivotal trends that sparked their efforts to devise the project: the public debate over unprecedented levels of merger activity; the conflict about shareholder voting rights; and the growing importance of pension funds and other institutional investors.

In addition, they say the October market crash heightened awareness of concerns regarding the volatility of capital markets and the growing tensions in the relationships between fiduciaries and money managers on the one hand and boards of directors and officers of corporations on the other.

The founders of the Columbia project, which will involve a series of parallel studies over a period of several years, hope their work will become an ongoing focal point for data collection, research and analysis on the interaction of American industry and institutional investors. They are still working out a draft for the project, which is expected to change as they get input from board members.

Based on the initial draft, one aim is to fill the substantial gaps in the knowledge of how fiduciary trustees and professional money managers select, hold and vote shares, and their perception of their various roles in the securities markets.

A second objective is to study other financial systems, particularly England and the so-called bank-based systems of West Germany and Japan, to understand the interaction of corporations and institutional fiduciaries and money managers and how their experience might apply to the United States.

The third goal is to develop a discussion between fiduciaries and fund managers and corporate boards and officers concerning such critical issues as when and how institutional holdings are acquired and disposed of, voting patterns of institutional holdings and fiduciary obligations of trust-

*Continued on page 49*

# Funds retain Texas bank

By Fred Williams

**DALLAS — Institutional trust clients of beleaguered First RepublicBank Corp., Dallas, are keeping a watchful eye on the bank's financial condition, but have not abandoned the bank.**

**First RepublicBank reported losses of $347.8 million in the fourth quarter of 1987, bringing**

*Continued on page 49*

First RepublicBank Plaza

# Rate indexes premiere

*Pensions & Investment Age* will publish each month market-related interest rate indexes developed by two consulting organizations to calculate unfunded pension liabilities.

Buck Consultants, New York, and Ennis, Knupp & Associates Inc., Chicago, created the indexes in response to the Financial Accounting Standards Board's Statement 87, which required companies to calculate unfunded liabilities using a market-related interest rate but did not specify what the rate should be.

The two organizations developed the indexes in different ways.

The Buck Forward Rate Index, as its name implies, is based on forward rates. A forward rate is the price at the beginning of the year, expressed as an interest rate, of a unit of cash flow that will be received at the end of the year.

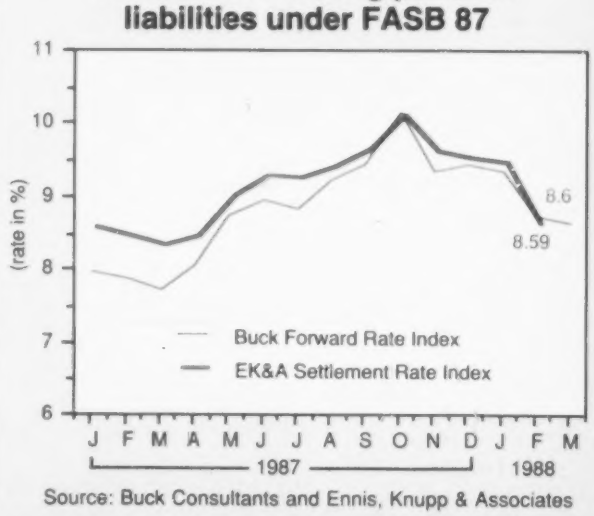
Buck bases its index on the forward rates for U.S. Treasury securities. The forward rates based on the term structure of interest rates on Treasuries are applied to the cash flows of a model pension plan to determine the present value of benefits. A calculation is then made to determine what single interest rate will produce the present value. Separate calculations are made for active employees and retired employees, and the weighted average of these two rates is the Buck Forward Rate Index.

The Ennis Knupp & Associates Settlement Rate Index is based on the annuity rates used by insurers to price pension obligations of companies that wish to terminate their pension plans. This rate has become known as the settlement rate.

Because insurance companies set their rates independently, based on the demand for their assets, current interest rates and past settlement rates, there is no universal settlement rate.

Ennis Knupp uses an algorithm to estimate current settlement rates from long-term bond rates and historical settlement rates. The latter are supplied by a number of insurance companies active in the group annuity market. ■

**Indexes for valuing pension liabilities under FASB 87**




Source: Buck Consultants and Ennis, Knupp & Associates

GLOBAL INSTITUTIONAL INVESTORS

# Choices after October

## With some exceptions, home is where assets stay

By Marlene Givant

While all global institutional investors pulled some assets home following the stock market crash, the Japanese are readying to send parcels abroad.

Japanese institutions still have massive amounts of capital to invest, and their trade surplus situation will mandate a return to foreign markets. Observers think the Japanese might take several courses:

- boost non-Japanese equity commitments to approximate last year's projected net of $17 billion;
- resume foreign bond purchases to the 1986 level of $93 billion, compared with the 1987 level of about $74 billion;
- increase direct foreign investment at a faster clip than securities purchases.

Meanwhile, European investors are catching their breath and staying put. The drop in equity prices in Europe probably will cause a drop in net inflow in the domestic equity markets and benefit the bond markets in 1988, according to a flow of funds report from Banque Paribas Capital Markets, London. Already, European investors are shifting domestic assets into bonds.

Foreigners are expected to sharply reduce equity investment in the Continent given its weak growth prospects. In addition, a 10% withholding tax on West German domestic bonds proposed for 1989 could adversely affect the flow of outside funds into that area. That money could be directed instead to Swiss or Dutch bonds.

U.S. investors — notably pension funds — however, are continuing to buy foreign securities and following through with plans to diversify overseas, according to Danielle Kadeyan, vice president of Salomon Brothers International Ltd., Tokyo.

But no global institutions are expected to match the Japanese in terms of range and growth of foreign investments in 1988.

Although stock markets crashed worldwide just as Japanese institutions were making their first sizable move into foreign equities, the Japanese are eyeing foreign stocks again, especially in the United States.

And with a steadier dollar, Japanese institutions are likely to resume purchases of foreign bonds, particularly U.S. government issues. (Foreign exchange and interest rate uncertainties sent Japanese investors' January net purchases of foreign bonds to their lowest point since March 1984, totaling $1.34 billion, down 33.3% from the previous month, according to the Ministry of Finance.)

Japan's $96.5 billion 1987 trade surplus will mandate Japanese foreign investment, especially in the United States.

"It's double-entry bookkeeping. . . . In practical terms, we need bilateral flows from Japan to the U.S. to solve both countries' trade imbalances," said Robert Brusca, chief economist and senior vice president of Nikko Securities Co. International Inc., New York.

Indeed, investment patterns that emerged in 1987 are unlikely to cease in 1988.

Japanese direct investment abroad increased each quarter in 1987, with nearly 30% of the outflows in the fourth quarter, said David Strongin, director of international finance of the Securities Industry Association, New York, and author of a report on Japanese investing.

John Calverley, senior economist of the American Express Bank, London, likened the vast scale of direct investment out of Japan to the U.S. expansion overseas in the 1960s. "The Japanese are becoming high-cost producers because of the high value of the yen," he said. "They want manufacturing operations in the U.S. and developing countries where there's cheap labor."

Japanese net purchases of foreign stocks in 1987 swelled to $17 billion from $7 billion the previous year, with about 65% to 70% in U.S. equities, the SIA report said.

In the first three quarters of 1987, the Japanese accounted for 40% of foreign net purchases of U.S. equities before declining in recent months, according to U.S. Treasury data.

The Japanese eventually might surpass U.S. investors in terms of gross equity activity away from home. In the first three quarters of 1987, Japanese foreign gross investment accounted for 30% of total foreign equity activity vs. 25% in 1986. The U.S. number posted a meager rise to 38.8% from 37.4% during the period, the SIA report said.

Foreigners, in turn, are reversing their strategies in Japan. After driving their representation down to 2.5% of the Tokyo stock market at the end of December from 4% before Oct. 19, foreign investors have

*Continued on page 24*

### World's markets, investors examined

**Institutional investors have dominated the markets around the world throughout the 1980s. As U.S. institutions devoted an increasing portion of their assets to foreign investments, information on other markets and their investors has become vital to investing knowledgeably.**

**Now, investors are asking whether the 1987 crash spelled the end of global investing.**

**Have institutional investors retreated to their domestic markets for good? What are the implications for U.S. markets? What developments and trends are occurring around the world that affect institutional investment?**

**To explore these and other issues, *Pensions & Investment Age* presents a state-of-the-art look at institutional investing in nine countries: Japan, the United Kingdom, West Germany, Switzerland, France, Italy, Spain, the Netherlands and Australia.**

**These countries have the largest equity markets and the best-developed pension systems outside of North America.**

**What's going on in their markets and among their institutional investors has tremendous implications for U.S. investors — both in their own markets and abroad.**

# Explosive Japan looking overseas

By David Kilburn

TOKYO — Japanese institutional investors cut their teeth in the equity markets through "tokkin" accounts. Now, like toddlers learning to walk, they might have to relearn their lessons after the tumble they took last year.

Nevertheless, the growing role of Japanese institutions in global equity markets won't be reversed.

"There simply are not enough instruments available in Japan to absorb the money available. This is one of the main forces behind overseas investment by the institutions. This same pressure is also a reason why the (Tokyo Stock Exchange) can go up at such an incredible pace," said Anne Cabot, senior marketing manager at Sanyo Securities Co. Ltd., Tokyo.

Tokkin funds, which are vehicles for the investment of surplus corporate assets, led the change in institutional investors from cautious bond investors and long-term holders of corporate equities to more active equity players.

**Top 5 institutional investors**

($ billions as of March 31, 1987)

| | |
|---|---|
| Sumitomo Trust (MB) | 51.5 |
| Nippon Life (IN) | 49 |
| Mitsubishi Trust (MB) | 46.7 |
| Mitsui Trust (MB) | 38 |
| Toyo Trust (MB) | 31.5 |

**Top 5 pension funds**

| | |
|---|---|
| Local Gov't Employees | 65.5 |
| Nat'l Gov't Employees | 22.5 |
| Employees Pension Fund | 8 |
| All Japan Mutual Credit Bank | 2.1 |
| Hitachi | 1.3 |

Source: InterSec Research Corp., London

Boosted by burgeoning corporate surpluses, the tokkin and related fund trust accounts have surged in the past three years, to $229 billion in November 1987 from $21 billion in March 1985, according to Japan's Trust Bank Association.

Traditionally, corporations purchased strategic holdings in companies with which they did business, but did not trade them. But the tokkin money, held in separate funds, permitted companies to experiment with different investment strategies.

The result was a fantastic level of trading, including what some believe were speculative excesses. According to an analysis by Masanobu Takahashi, research director of Sanyo Securities, trading by tokkin and fund trusts accounted for about 15% of the total floating supply of equities in 1986, with portfolio turnover ratios up to 300%.

The importance of these funds to the $3 trillion Japanese stock market has become clear: threats of stock sales by the funds inspired the Ministry of Finance to take two crucial steps in January.

To prevent such sales, the ministry eased accounting requirements for tokkin and fund trust accounts, and permitted life insurance companies to boost their tokkin accounts to 5% of assets from 3%. It also postponed a rule change so losses on tokkin holdings could be diluted by unrealized capital gains in long-term securities holdings.

Since August, however, the flow of new money into tokkin funds has slowed, as more corporate cash has been poured into capital investment.

But if tokkin fund growth is slowing, Japanese pension funds are taking off. Both domestic and foreign firms are elbowing to break into the $190 billion corporate pension fund market. While only trust banks and insurance companies can manage the funds, brokers and national banks are seeking permission to provide investment advice to the market, which is expected to reach $255 billion by 1990.

Meanwhile, the Health and Welfare Ministry has proposed legislation allowing pension funds with more than $150 million (20 billion yen) in assets to manage up to one-third of assets internally.

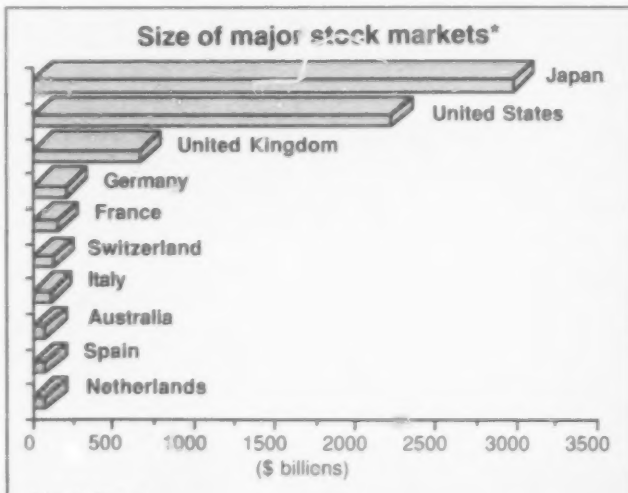
The growth of all types of Japanese institutional investors has led to long-reaching changes in investment approaches.

*Continued on page 24*

**Valuation measures of world equity markets**
**(as of Feb. 12, 1988)**

| | Current p/e | Average p/e 1973-86 | Current p/e as a % of average | Current earnings yield | Long-term gov't bond yield |
|---|---|---|---|---|---|
| Australia | 10.2 | 11.3 | 90.1% | 8.83% | 12.60% |
| France | 12.6 | 11.8 | 106.8 | 8.47 | 9.49 |
| Germany | 10.7 | 11.6 | 92.2 | 8.62 | 6.10 |
| Italy | 15.9 | 27.3 | 58.2 | 3.66 | 10.23 |
| Japan | 59 | 22.9 | 257.6 | 4.37 | 4.45 |
| Netherlands | 10 | 6.8 | 147.1 | 14.71 | 5.99 |
| Spain | 16.6 | 11.3 | 146.6 | 8.83 | 12.77 |
| Switzerland | 10 | 11.5 | 87 | 8.70 | 4.07 |
| United Kingdom | 13 | 10.5 | 123.8 | 9.52 | 9.42 |
| United States | 13.5 | 10.3 | 131.1 | 9.71 | 8.42 |

Source: Merrill Lynch Capital Markets, New York




*As of Jan. 1

Source: Morgan Stanley Capital International, New York.

# British taking few chances

By John Westwell

LONDON — Despite the U.K. stock market's woeful performance in 1987, British institutional investors think the domestic market is the place to be in 1988.

While they have shifted assets to British stocks from foreign equity markets since October, they are playing the market very cautiously.

"The message is we seem to be on course for a soft landing but not for a collapse," said John Shelley, director of London-based MIM Britannia, which has $2.07 billion under management.

David Barker, director of merchant bank Hill Samuel Group Ltd., London, with about $24.4 billion under management, said both U.K. stocks and real estate are cheap at today's level but he is concerned the market is unlikely to make any rapid recovery in the next few months.

While he thinks the stock market will be higher next year, at the moment trading is "definitely sluggish and nervous."

"Flat" is the verdict of Donald Brydon, director of asset management at Barclays de Zoete Wedd, London. The strategy at BZW, which is the investment arm of Barclays Bank PLC and has $19 billion under management, is "defensive and well-diversified," Mr. Brydon said.

British pension funds, with an estimated $450 billion in assets, have kept up their strong commitment to stocks. The Wyatt Survey of Pooled Pension Funds shows British fund managers had 74% of assets in stocks at the end of 1987, down minimally from 75% at the beginning of the year.

The big change, according to Wyatt, was that U.K. equities increased to 58% of total assets from 53% while foreign equities dropped to 16% from 22%.

This commitment to British stocks comes despite the U.K.'s dismal performance since October. The Financial Times-Stock Exchange 100 index has fallen 386.9 or 17.6% since Oct. 15 to its March 11 closing of 1,810.4. This represents a recovery, however, of 249.9 points, or 16%, from its low Nov. 9 of 1,565.2.

Just as important is the falloff in trading volume. In the week before the crash the average number of shares traded per day was 594 million, with an average value of shares traded of $3.76 billion. By the week ended Feb. 26, these figures had slumped to 394.14 million and $1.95 billion respectively.

At the end of 1987, there were 2,061 domestic equities with a market capitalization of $635.7 billion traded on the International Stock Exchange (formerly the London Stock Exchange). There also were 126 securities traded on the gilts (government bond) market with a combined value of $249.7 billion.

In the U.K. equity market, life insurance and pension funds own about one-half of outstanding equities while unit trusts, general insurance companies and investment trusts account for a further 10%, according to Salomon Brothers Inc., London.

Unit trusts in particular have soared, growing more than 500% between 1981 and 1986, to $48.6 billion.

Given about 60% of all transactions are conducted between marketmakers, that suggests institutional investors are unwilling to commit themselves to the equity market, although the experts are not in accord.

Executives at Capital House Investment Management Ltd., a wholly owned subsidiary of the Royal Bank of Scotland Group PLC, which manages more than $3.6 billion, including $2.52 billion in pension assets, point out equities have provided long-term returns well above those in cash and bonds.

A typical asset allocation for a Capital House client as of this month was 63.5% in U.K. shares and convertible securities, 18.5% in overseas securities, 7.5% in fixed income and 10.5% in cash.

But some managers are looking more to bonds than they have in a long time.

"We advised clients to put 40% into gilts 18 months before the crash," said Piers Mount Stephens, a director with pension fund responsibility at C.S. Investments Ltd., London, which has $900 million under management.

"There appears to be a lot of cash now available in the pension funds but nobody knows what to do with it. If pension fund managers commit it to bonds, it would be an admission that they got it wrong to start with," he said.

Although investments by U.K. funds into real estate have been on the decline — a typical allocation in a major fund ranged between 5% and 10% in October, down from an average 21% in 1981 — perceptions might be changing.

"After the twin October hurricanes (an actual hurricane Oct. 16 followed the financial one Oct. 19), property is once again seen as a more stable form of investment," said Nick Ryan, secretary of the $360 million Superannuation Arrangements of the University of London. "Now that some of the glamor has gone out of equities, we should seriously be studying the property markets."

The fund's exposure to property has been limited to pooled investments, Mr. Ryan said. "But with the advent of unitized single property instruments (similar to real estate syndications) in the U.K. expected later this year, SAUL and other funds see new opportunities for direct property investment," he added. ■

**Top 5 Institutional Investors**

($ billions as of Dec. 31, 1986)

| | |
|---|---|
| Prudential (IN) | 34.6 |
| Robert Fleming (MB) | 29.6 |
| Mercury Asset (MB) | 26.4 |
| Morgan Grenfell (MB) | 21.3 |
| Legal & General (IN) | 16.7 |

**Top 5 pension funds**

| | |
|---|---|
| British Coal | 15.2 |
| Electricity Council | 11.1 |
| British Telecommunications | 5.4 |
| Post Office | 3.6 |
| British Railways Board | 3.4 |

Source: InterSec Research Corp., London

**Key to investor types**

**CB**: Commercial bank
**MB**: Merchant bank
**IM**: Independent mgr.
**UT**: Unit trust mgr.
**IN**: Insurer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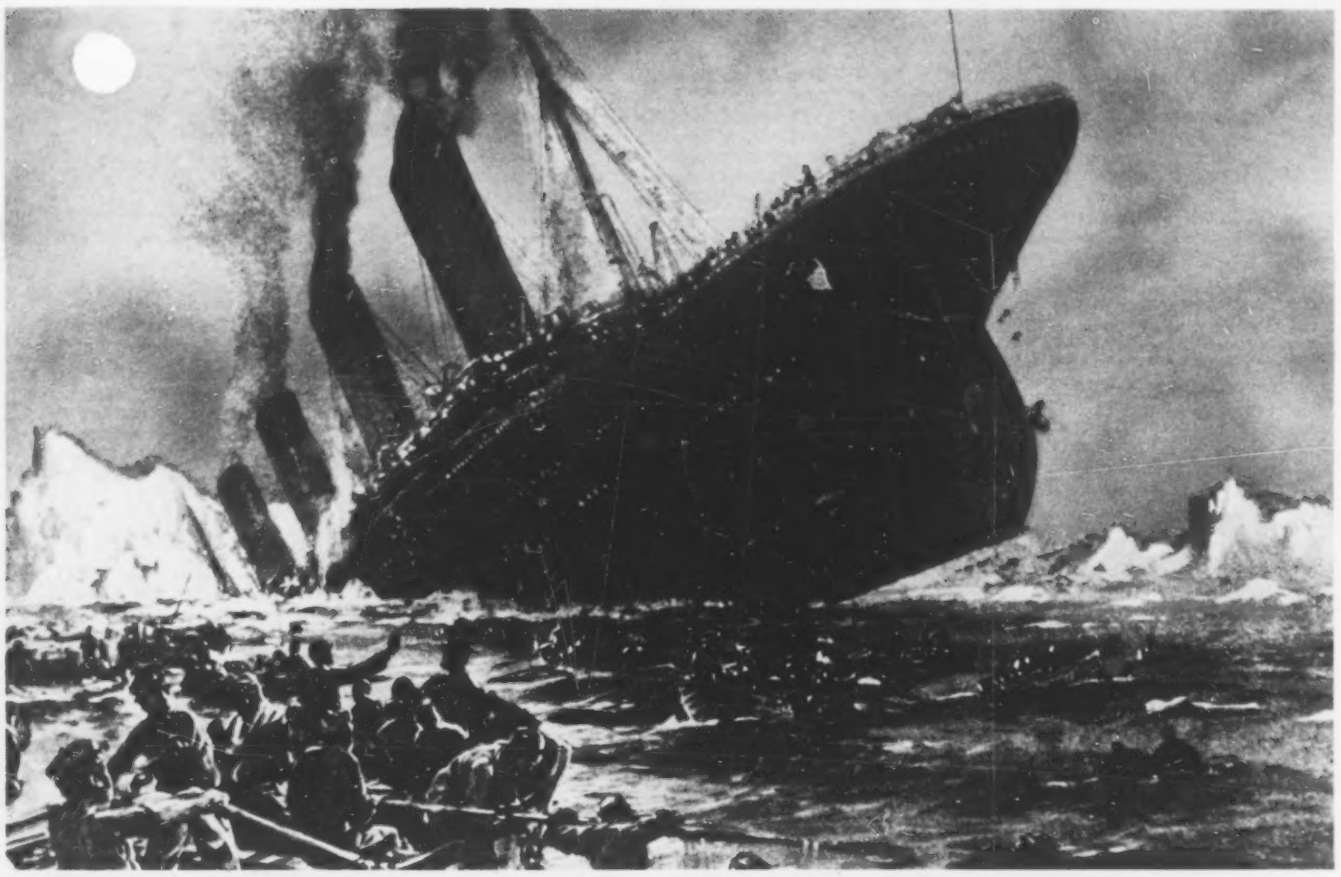

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# Glimmer for equities

## Germans take a gamble on stock market

By Peggy Trautman

BONN, West Germany — Contrary to many investors, West Germany's traditionally conservative institutional investors have increased their stock positions in the wake of Oct. 19.

While that might seem surprising, at first, it's not: German institutional investors — mostly life insurance companies and pension funds — now have invested 8% to 9% of assets in stocks, up from about 6% before October.

But any increase in stock holdings is welcomed by analysts — especially in light of the drubbing investors took on the German exchanges. West Germany was one of the worst-performing markets in 1987, dropping 33.4% from Oct. 15 to year end.

German investors, both institutions and individuals, remember the losses of the post-war years and are closely tied to bonds.

Now, although individuals still are holding back, institutional investors are finding stocks more attractive.

"Since stocks were basically cheap (after the crash), it reduced the attractiveness of competing investments," said Siegfried Hoecker, head of equity investment for Capital Management International GmbH of Deutsche Bank, Frankfurt, which manages $2 billion in discretionary assets for foreign and domestic clients.

West German investors made net stock purchases of $8.99 billion in 1987 — of which $8.73 billion were made in the last quarter. Most of those purchases probably were made by institutions, which owned 83% of all German stocks as of year-end 1986 (the latest data available). The remainder was held by individuals.

Institutional investors' willingness to take a bigger bet on stocks also might stem from a fundamental change in attitude.

"They are becoming conscious of the fact that it doesn't make any sense to jump in and jump out," said Ekkehard Scheid, a partner in Portfolio Management GmbH, Munich, which manages $190 million in assets.

Hans-Dieter Runte, managing director of BHF Trust Management MbH, Frankfurt, which manages $3.8 billion in discretionary assets for foreign and domestic clients, agreed. He noted institutional investors were not nearly as cautious after the crash as many observers had feared, reflecting their long-term commitment to the market.

West German institutions also are running counter to the traditional notion of "witschaftswunder" — that is, when the Germany currency is strong, export-reliant corporate profits are weaker. Thus, German investors typically flee to bonds when the deutsche mark is strong.

Fortunately for the West German market, this change in attitude revealed itself as foreign investors fled during the crash.

Foreign investors were net sellers of $1.5 billion in stock, and many — especially the British and Swiss — are slow in returning. And it's not clear when foreign investors will come back.

West Germany's planned 10% withholding tax on income and dividends might deter foreign investors. It already is driving up pricing, causing yields on domestic debt instruments to increase by 25 basis points in February, according to the Bundesbank, the country's central bank.

Foreign investors also fear the deutsche mark's increase against the dollar will harm German exports. If the exchange rate holds at the 1.70 level, economists figure German industry will get by; but further dollar depreciations would be bad news for the market, said Capital Management International's Mr. Hoecker.

But the most important investors are the banks, which were forced into the role of dedicated marketmaker or willing speculator — depending on opinion — immediately after October's panic. Banks, which have $1.8 trillion in capital, bought $320 million in shares. Later, when a downward trend was evident, they sold $570 million in stocks to cut their losses.

Now the banks would rather return to government bonds, where returns are high and risks low. However, it might be too soon. "Even if one bank were to sell (its stock holdings), the bourse could fall all over again," one major bank official said. "And the expected rebound has not been quick in coming." ■

**Top 5 institutional investors**

($ billions as of Dec. 31, 1986)

| | |
|---|---|
| Allianz Group (IN) | 24.5 |
| Deutsche Bank (CB) | 21.5 |
| Dresdner Bank (CB) | 18.5 |
| Volksfursorge Lebensversicherung (IN) | 6.3 |
| Hamburg-Mannheimer Versicherung (IN) | 5.9 |

**Top 5 pension funds**

| | |
|---|---|
| Deutsche Bank und Bankiergerwerke | 4 |
| Bayerische Arzteversorgung | 3 |
| Beugewerbe ZVK | 2.4 |
| Bayer AG | 2.2 |
| Hoechst AG | 1.9 |

Source: InterSec Research Corp., London

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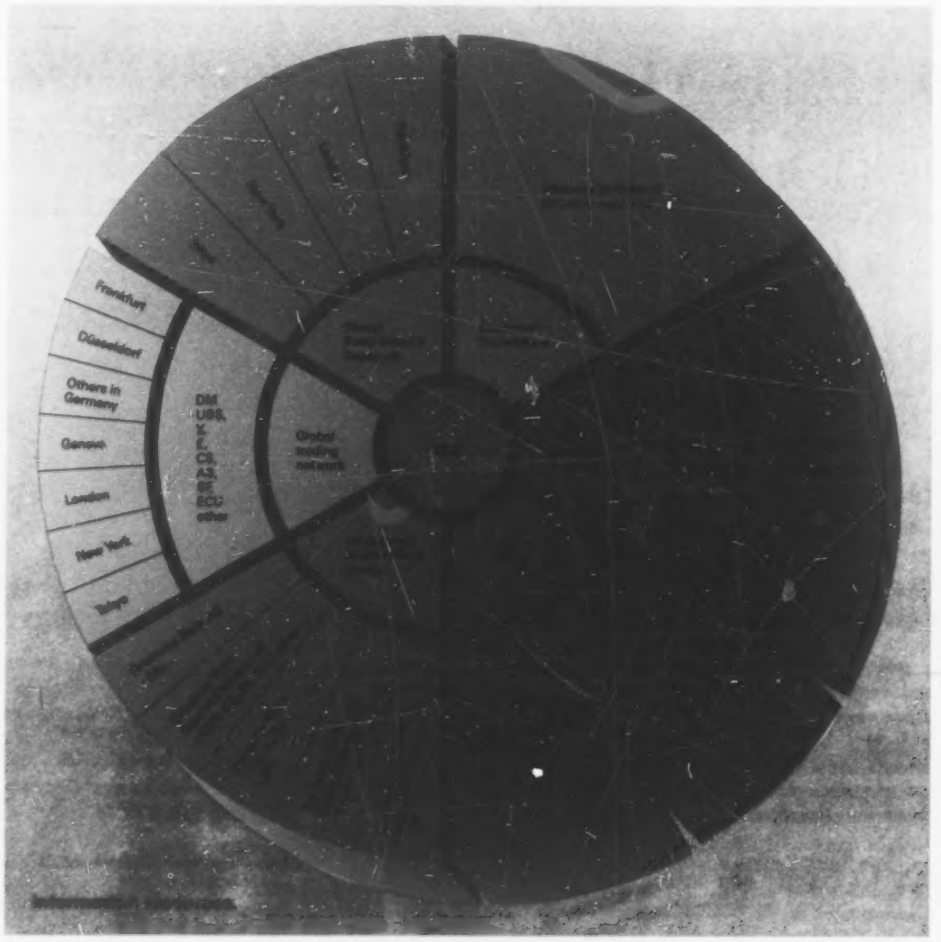


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# Spanish growth wild

By Paul L. Montgomery

MADRID, Spain — In the Spanish equities market, the highs generally are higher than the world average, but the drops are just as precipitous.

After racking up gains of 322.8% from July 1982 until the October crash, the Madrid exchange lost about 24.4% of its value by Nov. 13, but by March had recovered about half the losses.

Gains have continued, and with analysts finding most economic indicators favorable in Spain for continued growth, the outlook is for another record year on the exchange.

But with only a fledgling pension fund industry to provide stability and the highest economic growth rate in Western Europe, playing the market in Spain is a game for experts.

Spain, which joined the European Community with Portugal at the beginning of 1986, is already benefiting from its new associations. Spain's growth rate in 1987 was 4.1%, compared with the European Community average of 2.2% and the United States' 2.3%.

The estimate for 1988 is 3.7% in Spain, according to the European Communities Statistical Office. Part of the reason is that Spain has had further to come, but Spain also is in the midst of an economic boom.

Big banks are still the major stockholders in Spain, but foreign buyers, investment funds and the young pension industry are all making inroads. It was estimated foreign buying on the major exchanges last year rose 80% after a similar rise in 1986, although the total foreign purchases are still less than $2 billion.

Easing restrictions on foreign investors in May 1985 has helped. Foreign investors tend to be British, German, Dutch or Belgian, but last year there was a considerable influx of money from the Middle East, particularly Kuwait.

Spain's Socialist government has encouraged private initiatives in many areas, including private and union pension funds. Although institutional investors probably account for less than 10% of the Spanish market, the number is growing, said Jaime Montoya, president of Seguros Madrilenos, a Madrid-based investment fund consultant.

The government sees the pension funds as a way of channeling savings into industrial growth, although the funds have tended to diversify more into short-term government bonds since October. Insurance companies have moved aggressively into the pension fund market and expect to have 50% of the pension business by 1990. ■

**Top 5 institutional investors**

($ billions as of Dec. 31, 1986)

| | |
|---|---|
| Banif (IM) | 1.5 |
| Gestemar (IM) | 0.8 |
| Gesbancaya (IM) | 0.5 |
| Banco Urquijo (CB) | 0.35 |
| Beta Capital (IM) | 0.35 |

Source: InterSec Research Corp., London


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# Dutch market vibrant

By Paul L. Montgomery

AMSTERDAM, Netherlands — Old-timers on the Amsterdam Stock Exchange remember the prewar years, when the market was the world's most important after New York and London, and the oldest of the three.

The 50 years since then have seen many changes in institutional investors' attitudes, but the trading floor is still one of the most vibrant in Europe.

Amsterdam in the 1980s has seen an influx of outside investors trying to get monetary stability and undervalued equities. The market's price-earnings ratio rose to a peak of 13.7 in July 1987 and ended the year at 8.9, up from 5.9 at the end of 1982. That compares with a year-end average p/e of 11.4 for all European stocks.

Before Black Monday, it was estimated 50% of the turnover in the $74 billion stock market was accounted for by foreign investors, primarily from the United Kingdom, Switzerland and the United States. Since then, Japanese investors have increased their investments, overtaking U.S. investors who trimmed Dutch holdings.

But there is still a steady influx of interest from foreign investors seeking protection from dollar swings, steady returns and low-risk ventures. The market chalked up a 213.4% gain from July 1982 to the October drop, compared with the European average of 233.3%.

What makes the Netherlands different from other European investment climates is the power of pension funds and insurance companies, providing an anchor in such times of trouble as last October.

At the end of 1987, it was estimated the insurance companies and pension funds had almost $225 billion in capital, more than the net national income of $213 billion.

It is estimated institutions hold 15% of Dutch equities, while citizens hold 35% and foreigners 50%.

While it is true most of the pension capital goes into real estate and fixed-income securities, the market perked up in early 1988, rising 9.2% in the first two months, with institutional capital as a strong support. Private pension funds doubled their allocation to equities between 1980 and 1985, rising to 11.7% from 5.7%, according to government statistics.

Meanwhile, the loosening of government restrictions by the center-right government of Prime Minister Ruud Lubbers has presented opportunities for further opening of the market. ■

**Top 5 institutional investors**

($ billions as of Dec. 31, 1986)

| | |
|---|---|
| Robeco (UT) | 13.7 |
| Nationale Nederlands (IN) | 13.5 |
| Gemeenschappelijk Administratiekantoor (IM) | 7.6 |
| Algemene Bank (CB) | 4.3 |
| Aegon (IN) | 3.2 |

**Top 5 pension funds**

| | |
|---|---|
| A.B.P. | 63 |
| P.G.G.M. | 12.3 |
| Philips | 7.3 |
| Shell | 4.9 |
| Metaalnijverheid | 3.5 |

Source: InterSec Research Corp., London

# Bad days for stocks

## Australia pulls hard toward conservatism

By Geoffrey Lee Martin

SYDNEY, Australia — Domestic and foreign investors have pulled back from equities in the wake of the Australian market's horrendous October performance.

"There can be no doubt about it, the market has swung more toward conservatism," said Nigel Weaver, investment manager at Capita Financial Group Ltd., Sydney.

And foreign capital has fled the Australian stock market. TPF&C inc., Sydney, estimates foreign investors held between 25% and 30% of the market Sept. 30, but now hold between 7% and 10%.

Only in the past few weeks have foreign investors shown renewed interest in the Australian stock market, observers said.

Once one of the high-flying markets, the market fell 44.7% in October, according to the Morgan Stanley Capital International World index.

The institution-dominated market had risen 381.3% from July 1982 until the October drop, according to Morgan Stanley Capital International, New York. The market, which stood at $132 billion in U.S. dollar terms as of Sept. 30, plunged to $83 billion by year end.

But it has since recovered to $100 billion by the end of February, Morgan Stanley statistics indicate.

The October drop was especially hard on gold and other resource-related stocks. Because the Hong Kong and Singapore markets were closed the week of Oct. 19, foreign investors seeking to unload non-Japanese Pacific Basin stocks had only Australia open to them, said Brian Sherman, chairman-joint managing officer of Equitilink Australia Ltd., a Sydney-based money manager.

Since October, most Australian money managers have lightened their equity commitments, largely in response to pressure from clients.

As of Jan. 1, holdings of Australian stock had dropped to 29.1%, down from 36.3% on Oct. 1, according to a survey of pooled funds of major Australian managers by The Wyatt Co. Proprietary Ltd., a Sydney consulting firm.

Holdings of overseas equities also fell, to 20.2% from 23.2%, while domestic fixed-income holdings rose to 25.7% from 21.5%, international fixed-income increased to 1.5% from 0.3%, property grew to 15.7% from 13.7%, and cash increased to 7.8% from 5%, the survey found.

While much of the decline in stocks stems from the fall in market values, some managers have cut their equity allocations, explained Colin Westman, Wyatt's managing director for the Sydney office.

Managers have fled to blue-chip stocks. Since the crash, "second board" listings are not marketable, Mr. Westman said. "The emphasis is much more on fundamental value, getting away from using charts, using horoscopes," he said.

But the drop in equity holdings might have come at the worst time, if the market resumes its upward course, as it has in recent weeks, some said.

Some are betting on the revival of the Australian market.

Rothschild Australia Asset Management Ltd. has 45% of pension assets in domestic stocks. In the long run, equities will outperform other assets classes, and pension funds can afford to take the long view, said Peter Griffin, chief executive. The Melbourne-based firm runs $3.2 billion in pension assets.

One of the most aggressive investors is Equitilink, which has a 66% equity position, four-fifths of which is in Australian stocks. The firm manages nearly $1.9 billion in total assets, of which about 20% is pension assets.

Mr. Sherman bases his belief the market will surge on several factors: a drop of 200 basis points in long-term interest rates since the crash; the Australian budget surplus; the decline during the past three years in the current account deficit; and the inflation rate, which has fallen 300 basis points during the past year to 6.5% to 7% level.

But there might be a cloud on the horizon for the $45 billion to $60 billion Australian pension market.

To offset an expected cutting of the corporate income tax rate, the government has signaled it might seek some type of tax on funds.

But any word on that likely will wait until after the Australian government issues its midyear budget proposals in May. ■

**Top 5 institutional investors**

($ billions as of Dec. 31, 1986)

| | |
|---|---|
| B.T. Australia (MB) | 2.4 |
| Westpac Investment (CB) | 2.3 |
| Australian Mutual (IN) | 2.1 |
| National Mutual Group (IN) | 1.9 |
| Wardley Australia (MB) | 1.2 |

**Top 5 pension funds**

| | |
|---|---|
| State Board/N.S.W. Superannuation Fund Investment Trust | 3.3 |
| Commonwealth Bank | 2.6 |
| Public Authorities/N.S.W. | 2.5 |
| Westpac | 1.8 |
| | 1.3 |

Source: InterSec Research Corp., London

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# Change hits France

By Paul L. Montgomery

PARIS — Financial markets in France are in the midst of a revolution almost as far-reaching as the "off-with-their-heads" version of 200 years ago.

France has been privatizing nationally owned companies, increasing the number of individual shareholders. At the same time, market reform is helping the traditionally protected French market prepare for the barriers-down European economic integration scheduled to start in 1992. And development of a private pension system will increase savings and investment.

When the Conservative government was elected two years ago, it announced an ambitious program of privatization and market reform. The banks and industries returned to private hands provided a bonanza for the market, particularly because the early shares were undervalued and gave ordinary investors the idea there was money to be made.

**Top 5 institutional investors**

**($ billions as of Dec. 31, 1986)**

| | |
|---|---|
| Banque Paribas (CB) | 14.5 |
| Assurances Generales (IN) | 12 |
| Banque Nat'l de Paris (CB) | 10 |
| Societe Generale (CB) | 9.8 |
| Groupe des Assurances (IN) | 7.9 |

Source: InterSec Research Corp., London

Consequently, the number of French citizens owning stock has risen to more than 7 million compared with 1.7 million 10 years ago. In addition, the law limits foreign purchases to 20% of shares in any privatized company.

While October's volatility held up for three months the privatization of Compagnies Financieres de Suez, the holding company for Banque Indosuez, the privatization campaign is back on track.

The government, when elected, also decided to break up the monopoly on trading held by a select group of brokers, a move that should foster modernization of the securities industry. Beginning this year, banks were allowed to buy up to 30% of a brokerage. This will rise to 100% in 1990.

By 1992, any financial institution or service firm, foreign or domestic, will be free to trade on the Bourse, subject to ministerial review.

The results already are being seen in a professionalization of the market, with emphasis on research and strategy and a premium on international contacts, said Francois Sureau, a director of Compagnies Reunies Europeannes, Paris.

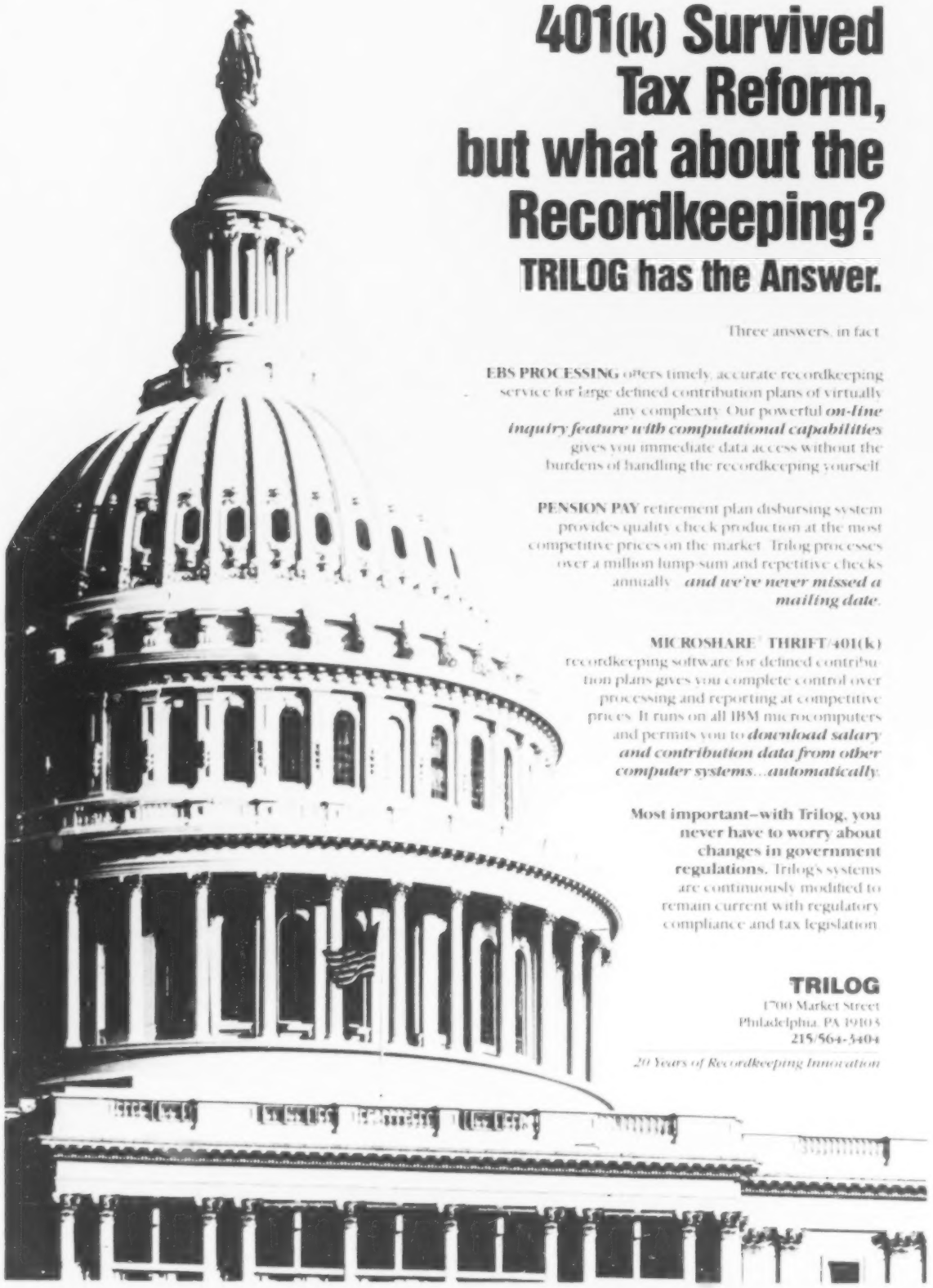
The sophistication is being felt in London, where trading of French shares has dropped to less than 9% of volume from about 15%, said Alain Dufour, partner in the brokerage firm of Dufour-Koller-LaCarriere, Paris.

More and more, with 705 stocks worth $154 billion at year end on exchanges in Paris, Bordeaux, Lille, Lyon, Marseille, Nancy and Nantes, the emphasis is on speed and information. New products are springing up virtually overnight.

International asset management has become a forte of such banks as Banque Paribas, Dumenil-Leble Bank and Banque Indosuez; the futures market started about two years ago; and there is a market developing in venture capital.

Because France has an extensive national pension system, private funds are not yet a big factor in the market. But a year-old law, designed to encourage the development of a private pension system, provides tax incentives to funds and participants.

The most popular type of plan adopted under the new system is the open-end profit-sharing plan, where a company contributes a portion of profits above a certain level. Banks and financial institutions have built busy departments managing the trusts, which are required to invest at least 30% of their assets in French government bonds or French francs. ■

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# Swiss stay in bonds

By John Parry

GENEVA, Switzerland — Any hopes that Swiss pension funds would turn to stocks from traditional bond investments were dashed Oct. 19.

The $132.5 billion Swiss stock market, which dropped 33.8% in the fourth quarter, had only begun to see significant stock purchases by pension funds, encouraged by a 1985 law allowing them to put up to 30% of their assets in equities.

"Any thought that institutional investors were going to become more adventurous after the advent of the (pension law) was swept out of the window by Black Monday," said Walter Ruegg, president of Swiss Volksbank, Bern. "What we're seeing now is a hunkering down in bonds and real estate — and a scenario where we wait to see what the U.S. market is going to do."

Swiss investors aren't likely to venture into foreign markets either. Peter Widmer, a member of the board of directors of Bank Julius Baer, Zurich, said, "There's going to be a considerable retrenchment, and the exposure in foreign markets, never very strong, is going to shrink even further."

Swiss pension funds have dropped their stock investments by two-thirds, reducing equities to 4% at the end of 1987 from 12% a year earlier. Bonds have increased by a similar proportion, to 39%. Other investments are in real estate, 18%; mortgages, 9%;

*Continued on page 23*

**Top 5 institutional investors**

**($ billions as of Dec. 31, 1986)**

| | |
|---|---|
| Union Bank Switzerland (CB) | 150 |
| Swiss Bank (CB) | 130 |
| Credit Suisse (CB) | 120 |
| Swiss Volksbank (CB) | 45 |
| Banca/Svizzera Italiana (CB) | 18 |

**Top 5 pension funds**

| | |
|---|---|
| P.T.T. Schweiz | 4.6 |
| Migros | 3.1 |
| S.B.B. | 2.6 |
| Coop Schweiz | 1.9 |
| Sulzer Brothers | 1.8 |

Source: InterSec Research Corp., London

# Italians leaving money at home

By John Parry

MILAN, Italy — Before last fall, Italian institutional investors were in many ways hamstrung in their efforts to invest in foreign markets. After last fall, there didn't seem to be much point in doing it anyway.

But Black Monday did not have a pronounced effect on Italian investors' interest in foreign stocks, according to Benito Covolan, head of the securities department at Cassa di Risparmio delle Province Lombarde s.p.a., one of Italy's three largest banks.

"The Italian investor, when he wanted to get into foreign markets, didn't go to his bank or his broker," Mr. Covolan said. "He hopped in his car and went to Chiasso," Switzerland, home to large branches of all the major Swiss banks.

Although the Swiss banks won't say so officially, 90% of their clients are Italians — including institutional investors — who prefer to do foreign securities dealings in Swiss francs.

But institutional investors, by and large, are staying at home and staying conservatively invested in bonds — even though restrictions on transferring money abroad were lifted last year.

Despite their conservative investments, institutional investors are increasingly important to the $109.3 billion Italian stock market. Banks comprise 45% of the market; pension funds, 10%; and mutual funds, 30%, although this is shrinking because of redemptions since Oct. 19. The remainder is individuals.

The Italian government is encouraging the development of the $64 billion pension market, but 70% of the assets are in the conservatively invested Istituto Nazionale della Previdenzia Sociale, the equivalent of U.S. Social Security.

**Top 5 institutional investors**

($ billions as of Dec. 31, 1986)

| | |
|---|---|
| Imigest (UT) | 10.2 |
| Primegest (UT) | 6.2 |
| Gestiras (UT) | 4.1 |
| Arca (UT) | 3.6 |
| Interbancaria Gestione (UT) | 3.6 |

Source: InterSec Research Corp., London

A new employer-sponsored pension system for management employees started Jan. 1. Supplementing the state-run program, the new, supplementary pension system has brought new income to insurance companies, which largely run it so far. But because the plans are so new, there are not yet reliable estimates of their expected growth.

Insurance companies already have put more than 60% of the new assets into bonds, 30% in real estate and only 10% in equities.

"They're wary of getting into the market, and nothing they have seen since October has made them change their minds," Mr. Wagner said.

"Even though the market has turned upwards in the first two months of this year, insurance company investment managers remain very conservative."

While there is a move toward a more open investment policy in Italy as a whole, pension and mutual funds still have to ask permission from the Bank of Italy to invest abroad.

Most don't bother; Mr. Covolan said his research shows the funds, like the insurance companies, are more interested in the bond market. The pension fund at Mr. Covolan's bank has only 1% to 2% in West German bonds — although that might be increased — and most of the other major funds are estimated at having approximately the same proportion in German or other European stocks and bonds. ■

# Swiss

*Continued from page 22*

domestic mutual funds, 8%; and 22% in loans to employees, according to Hans Kaufman, vice president of Bank Julius Baer.

The 1985 pension law permitted funds to invest up to 30% of their assets in stocks, with a ceiling of 10% of total assets in foreign stocks. Bond investments could equal 100%, with up to 30% in foreign issues.

Because many funds decided to take the plunge into stocks only a few months before the market fall, institutional investors will be even more cautious than before, said Felix Zulauf, first vice president of Union Bank of Switzerland, Zurich.

"The only thing I see as bucking this trend is that a few large institutional investors — banks particularly — have gone back into the equity market. . . . But it's not a major trend," he said.

The Swiss funds are becoming a larger force in the market, bolstered by the 1985 law's required participation by salaried employees. That rule will add $10.7 billion to $14.3 billion (15 billion to 20 billion Swiss francs) of new money to the funds each year, according to Mr. Kaufman. (The size of the pension fund market was not available.)

While some funds are turning to the safe haven of bonds, smaller pension funds are boosting their exposure to real estate, said Mr. Zulauf. But he warned that market is shrinking.

"This is a small country and office space in major cities is already at a premium," he said. "Not only that, but interest rates are low; I think we're going to see a switch away from interest in real estate by the funds in the next year." ■

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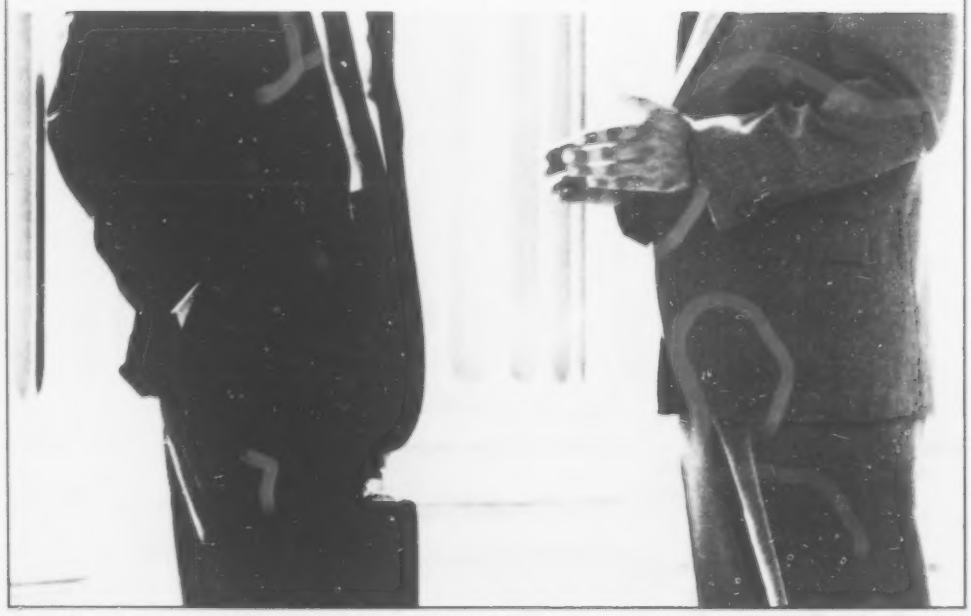

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# Japan looking

*Continued from page 17*

As of March 1987, financial institutions owned 41.7% of shares in listed companies, while corporations owned 24.5%. Individual ownership, which has been declining steadily since 1949, stood at 23.9%. The remainder was held by investment trusts, foreigners and other investors.

Government intervention has bolstered beliefs by Japanese institutional investors that the domestic market is the safest place to invest. Besides the Ministry of Finance's easing accounting rules for tokkin funds, it has taken several other actions to prevent the market from sagging. During the crash, it reportedly called on the support of Japan's Big Four securities firms, while the Tokyo Stock Exchange reduced margins for individuals. Since then, the government has allowed the creation of two trust funds to invest in financial services companies, and now might consider postponing the next sale of Nippon Telephone and Telegraph Corp. stock.

Between the intervention and a strong economy, the domestic markets have responded well, and the Nikkei index now is at levels within 5% of last year's peak of 26,646.43.

While domestic markets appear safer, they cannot absorb Japan's burgeoning mountain of cash.

Efforts to export yen have been promoted by the government. Consultant George Curuby, principal of Curuby & Co., Tokyo, said, "In response to the precipitous strengthening of the yen since the fall of 1985, the government has taken an increasingly liberal attitude to easing the (overseas investment) restrictions on the Japanese institutional investors."

"The key point is that the relaxing of the ceilings on investment really comes together with the efforts to promote capital outflows to reduce the yen's appreciation. Most institutional investors can now put large amounts overseas," he said.

Despite October's volatile market, Japanese overseas holdings remain at high levels. Net holdings of foreign stocks as recorded by the Japan Securities Dealers Association were $4.6 billion at the end of 1987, compared with $2.6 billion at the end of 1986. Similarly, foreign bond holdings were $114.9 billion at the end of 1987 compared with $89 billion in 1986.

But efforts to keep assets flowing overseas will have to overcome a renewed conservatism, money managers said.

"During the first nine months of 1987, I think Japanese investors were becoming more tolerant of risk," said Dennis H. Ferro, president of Japan Bankers Trust Co. Ltd., Tokyo. "We had begun to see a shift from U.S. Treasury bonds to the equity market, which is a reflection of an increased ability to take risk at that time." Now, however, Japanese investors are returning to earlier attitudes, he added.

Foreign exchange losses also have battered Japanese investors. Since the fall of 1985, the U.S. dollar has lost half of its value against the yen, causing Japanese to absorb huge losses on their U.S. Treasury bond investments.

Akira Shimizu, executive managing director of Nomura Securities Investment Trust Management Co. Ltd., Tokyo, said: "There are also foreign exchange risks and conflicting views about the development of the U.S. economy. All in all, there's too much uncertainty at the moment."

But despite the problems, there already are signs of reawakening interest in overseas investments, according to Kiyitoshi Aiba, director of investment management, Yamaichi International Capital Management Co., Tokyo. "Investing outside Japan is important to avoid the unnecessary risks entailed in investing only in Japan, especially as the correlations between Japan and other markets are very low." ■

# Home

*Continued from page 17*

become net buyers of Japanese stocks for the first time in 22 months, pumping $3.504 billion into Japanese equities in January and February alone.

"This has coincided with (the level of) the Japanese market reaching within 3% to 4% of its old high," noted Peter Green, president of James Capel Inc., New York.

"The higher Japan goes, the more pressure there is to invest there."

Japanese investors are continuing to buoy the Tokyo stock market and a number of supportive measures by the government will further boost liquidity. Even a small spill of that liquidity abroad in the near term would significantly affect the flow of investment funds worldwide.

Japanese individual investors are snatching up equities in the United States, with a new interest in small-cap stocks, said Shigayo Kawata, vice president of Daiwa Securities America, New York.

Japanese investment in Europe has been quite moderate relative to their wealth and their U.S. investments.

"As we look ahead, I would expect to see that increase as Japan becomes more comfortable with European bond and equities and disenchanted with the currency risk of investing in U.S. dollars," said Gilman C. Gunn, head of international fixed income research, Banque Paribas Capital Markets ■

**Gross activity in non-domestic equities by investors**
**($ billions)**

| Market | 1st-3rd qtr. 1987 | 1986 |
|---|---|---|
| Canada | 36.5 | 26.3 |
| France | ** | 32.5 |
| Japan | 278 | 185.9 |
| Britain | 95 * | 94.5 |
| U.S. | 359.2 | 277.3 |
| Germany | 35 * | 77.2 |
| Other | 122 * | 47.7 |
| Worldwide | 925.7 | 741.4 |

* Estimate from first-half figures
** Included in "Other"
Source: Salomon Brothers Inc., Statistics Canada, Treasury Bulletin, Bank of Japan

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# Railroads on different tracks

## Union Pacific Realty aims for status as top developer

By Joanne Friedrick

Union Pacific Realty Co., a subsidiary of railroad and energy concern Union Pacific Corp., wants to be one of the top 25 developers in the nation.

To achieve that, the company is expanding into three new areas of the country and will spend more than $850 million on developments within five years, said Edgar J. Gansz Jr., president and chief operating officer.

Mr. Gansz, who is based in the company's Omaha, Neb., office, said Union Pacific Realty annually will develop 3½ million square feet of primarily speculative office and industrial space in its target areas.

Suburban Chicago and Morris County, N.J., offices were added in 1987, a Washington, D.C., operation is scheduled to begin in the second half of 1988 and Dallas, Atlanta and Boston operations are on the drawing board.

Meanwhile, development in Los Angeles/Ontario, Calif.; San Francisco/Oakland; and Seattle will continue, but further activity in Denver and Houston is on hold.

Marilee Tatalias, director-real estate operations in the Oak Brook, Ill., office, said in building its new portfolio, the company is looking to achieve returns "that are more akin to entrepreneurial developers — low double digits."

Mr. Gansz said leveraged, after-tax, internal rates of return for low-risk properties (e.g. build-to-suit office) would be 13%; for high-risk buildings (e.g. industrial, high-tech speculative suburban), 19%.

Observers attribute Union Pacific Realty's pro-growth attitude to the hiring of New York-based Chairman Arch Jacobson, former Prudential Realty president, in 1986 and to the subsequent reorganization of management in 1987, which put Mr. Gansz, also an alumnus of Prudential Realty, in the president's spot.

Mr. Gansz said the search for Mr. Jacobson was a demonstration of Union Pacific's commitment to real estate. "One of the reasons we're in this business is that we realized real estate over the long term can be profitable. Union Pacific is a growth company. Our real estate undertakings will contribute to our corporation's growth."

The parent company's board "has made a significant commitment; it was not made lightly," he said.

The board's attitude is a significant departure; in the past, board members "were doubting Thomases who weren't secure enough to take risks," said Bob Dunn, former president of Missouri Improvement Co., the real estate subsidiary of Missouri Pacific Railroad that merged with Union Pacific in 1982.

Union Pacific Realty "is now structured so real estate doesn't take a back seat," he said.

"The railroad was getting more than the lion's share of the capital" when real estate was handled through Upland Industries by former railroad management, noted Mr. Dunn, now a broker with James T. Barry Co., Milwaukee.

Photo by Mary Hertehy

Marilee Tatalias of Union Pacific Realty's Chicago office inspects the site of the former Aurora Downs racetrack and future office-research and industrial parks.

Robert Kevin Brown, vice president-corporate services at Carter & Associates, Atlanta, and a 30-year veteran in corporate real estate, called Union Pacific Realty's recent hirings and new approach — adding markets outside its historic development areas — "the best possible way to go about it."

Mr. Gansz emphasized the realty company "will be a self-funding mechanism." In addition to implementing an existing

*Continued on page P23*

Mission Bay, a 300-acre project in San Francisco, will be retained by Santa Fe Pacific Realty Corp. even though the realty firm must sell $800 million to $1 billion worth of holdings to help finance a restructuring of the parent company.

## With takeover looming, Santa Fe sells, builds

By Joanne Friedrick

Santa Fe Pacific Realty Corp. is traveling parallel tracks while at least two suitors are fighting over control of its parent.

Executives of the San Francisco-based real estate subsidiary of Santa Fe Southern Pacific Corp., Chicago, are juggling a mandate to sell $800 million to $1 billion worth of holdings by year end to help finance a $4.695 billion restructuring with an ongoing development program that makes its parent such an attractive takeover target.

To help pay off the loan for a $25-per-share cash payment to shareholders and a planned $5-per-share subordinated debenture that make up the restructuring, Santa Fe Pacific Realty will sell 3.6 million square feet of its 8 million square feet in developed and fully leased buildings this year, with the goal of having all the buildings sold by 1992.

These developments include light industrial, distribution and warehouse buildings, low-rise offices, research and development facilities and retail centers, primarily in Southwest and West Coast states.

Although the figures are subject to change, Santa Fe ultimately is expected to sell 123 acres of its 500 acres in major projects; 6,650 acres of surplus land; all of its 150,000 acres of land grant agricultural holdings in the San Joaquin (Calif.) Valley; 500,000 square feet of miscellaneous property; and 4,900 acres of developable land.

Some sales, including that of agricultural land, had been under way before the restructuring.

Joseph O'Connor, president, Copley

*Continued on page P22*

# Trends show soft market will stay awhile

By William Fulton

Even though demographic and economic trends suggest the current soft office market will be more serious than merely a cyclical downturn, America's real estate developers don't seem to be paying much attention.

Among the warning signs:

- The flood of young people into the labor force virtually has stopped, sending job growth toward a 50-year low.
- More people are working at home, though no one knows for sure how many.
- On Wall Street and elsewhere, brokerage and investment houses are laying off white-collar workers, while the office work place is just now increasing worker productivity the way factories did much earlier.
- And David Birch, a professor at the Massachusetts Institute of Technology, Cambridge, Mass., predicts the United States will require only half as much office space in the decade ending in 1995 as was built in the decade ended in 1985.

**Excess office construction by region: 1975-85**

| Region | Need (mil. sq. ft.) | Excess (mil. sq. ft.) | %* |
|---|---|---|---|
| Mountain | 64.4 | 38.3 | 43.5 |
| W.S. Central | 130.6 | 73.3 | 37.4 |
| Pacific | 204.2 | 103.3 | 32.4 |
| E.S. Central | 25.4 | 21.3 | 20.1 |
| United States | 893.5 | 452.4 | 19 |
| S. Atlantic | 164.8 | 66.1 | 18.6 |
| E.N. Central | 68.1 | 64.9 | 14.2 |
| W.N. Central | 43.2 | 23.1 | 14 |
| New England | 70 | 14.1 | 8.9 |
| Middle Atlantic | 125.6 | 47.5 | 8.8 |

* Excess construction as a percentage of total 1975 office supply
Source: America's Office Needs: 1985-95, by David Birch, Arthur Andersen & Co., Chicago

Despite the warning signs, the value of building permits issued in the United States in 1987 declined less than 10% from 1986, and was greater than in any year prior to 1984, according to San Francisco real estate consultant Stephen E. Roulac.

As George Sternlieb, director of Rutgers University's Center for Urban Policy Research in New Brunswick, N.J., puts it: "There are probably not enough bottoms to fill all the desks in all the office buildings projected to be built in America."

The likely result of continued development in light of a fundamental shift in work habits will be a "crisis glut" in the early 1990s, with vacancy rates running 25% to 40% in some cities, large amounts of fairly new space being dumped onto the sublease market at bargain-basement prices, and — finally — a precipitous drop in office construction.

Because the recent boom in office development has attracted many new firms to the field, the number of casualties could be much higher than it was during recessions in the 1970s and early '80s.

The tremendous growth in office demand during the past few years has come about partly because of the increase in the labor force and partly because of the well-publicized conversion to a service economy. But now the Baby Bust is driving down labor-force growth, and real estate experts say the economic conversion is largely over, with office layoffs likely to continue for some time.

Labor-force growth in the '70s was remarkably high, running at almost 3% per year. Close to 3 million people — mostly Baby Boomers and women — entered the job market each year.

By the early 1990s, however, labor growth will be half what it was in the '70s, due in part to the low birth rate since 1965 and slower growth of women in the labor force, the Bureau of Labor Statistics predicts. Already, younger women are in the labor force in comparable numbers to men and, by the year 2000, the "working woman" phenomenon will have topped out completely.

These demographic trends have profound implications for office employment, which, in turn, dictates the demand for office space.

The Birch report, issued jointly by the MIT Center for Real Estate Development and Arthur Andersen & Co., was based mostly on estimates of job growth over the next 10 years. It contained some truly frightening numbers for office developers:

- Washington and New York will be virtually the only U.S. cities requiring as much office space in the next decade as they constructed in the previous decade.
- Only a few other major markets — Detroit, Baltimore, Philadelphia and Atlanta — will require even half as much space, while most Southwestern and Pa-

*Continued on page P23*

# Union Pacific

*Continued from page P3*

cash balance to finance acquisitions, plans are to sell "portions of the portfolio" to provide additional cash to continue development undertakings.

Estimates are the turnover could involve half of the new and existing properties — it already holds about 75 business and industrial parks in 22 states — with profits going to new development and to fatten the parent company's coffers.

Mr. Gansz said the asset management group also will add capital by selling off about 10,000 acres of raw land, mostly in markets the company is leaving — Salt Lake City, Cheyenne, Wyo., St. Louis and Kansas City, Mo.

Although $70 million to $80 million of land will be sold, up to $60 million will be spent on acquiring new land.

"We own our lands . . . We buy lands with our cash. What we plan to do is approach lenders and money sources primarily for construction and permanent financing. We'll continue to own our land. We don't plan to leverage land," Mr. Gansz said.

Union Pacific Realty undertakes joint ventures more as an exception. "Our strength is as developers," he noted.

"We would rather control 100% of the real estate, take 100% of the risk, and get 100% of the profit," Ms. Tatalias added.

Still, Union Pacific Realty will consider a joint venture if that's the only way it can get the land it wants, such as in parts of the Northeast, where there is a severe shortage of industrial land.

"We wouldn't be a passive investor," but the developing partner, said Tom Giannone, director-real estate operations.

Mr. Giannone, who joined Union Pacific Realty from Prudential Realty in July, acknowledged "there isn't much land for any real estate projects in New Jersey. We're looking at some pretty difficult sites now, sites that will take years to develop."

And he is looking at all projects warily. "I can't afford to have the first project get stuck in a down market," he noted. "But I think the market is still strong in several areas."

His five-person operation in Short Hills, N.J., is looking at developing in such places as Connecticut, upstate New York and northern New Jersey, as well as the highly developed Morris County area.

By the end of 1988, he said, he plans to have two projects under construction and another two office and industrial projects going through the approval process.

The first under contract is the 100-acre Triumph property in Florham Park and East Hanover, N.J., which will be developed into offices.

"We target projects in Chicago that have the best opportunity," she said. Markets might be softer and demographics weaker than they once were, Ms. Tatalias said, but developers "that have the assets to compete will do well."

She cited the Naperville project, saying that area "has good absorption numbers." When the office building comes on line in 1989, she said, there will be a "great window."

She also sees no problem with finding projects to meet Union Pacific Realty's goal of about $200 million in new developments around Chicago in the next five years. She has concentrated her search in the counties outside Chicago and is just now "tiptoeing into Cook County," in which Chicago is located.

> "We own our lands . . . We buy lands with our cash. . . . We'll continue to own our land. We don't plan to leverage land."
>
> Edgar Gansz
> Union Pacific Realty

From her suburban Chicago office, Ms. Tatalias and a staff of five are handling three major development projects while continuing to search for additional opportunities.

In January, Union Pacific Realty purchased 94 acres in South Barrington, Ill., from Beatrice Co. for an office campus. It already had contracts to buy acreage in the Naperville (Ill.) Office Park for a 135,000-square-foot office building and for the former Aurora Downs racetrack in North Aurora, Ill., which will be used for a 27-acre office-research park and a 70-acre industrial park.

Unlike Union Pacific Realty projects in California, which are primarily distribution facilities, Ms. Tatalias said Chicago-area ones will be light manufacturing and light industrial, with some back-office facilities.

Mr. Gansz said a search is going on now for a senior person to head the Washington office. Operating that office is contingent on having the capital, the staff and a sufficient market for a five- to seven-year development period.

Despite the move into new markets, 75% of this year's projects will be on land already owned. "A significant contributor will be in California," Mr. Gansz said, where 1.4 million square feet will go up in the Ontario area.

Union Pacific Realty also recently spent $60 million on 275 developable acres in Carlsbad, Calif., that was held by Carlsbad Research Center Associates, a partnership of Urban Diversified Properties (a division of Aetna Life & Casualty Co.) and the Koll Co., Newport Beach, Calif.

# Trends show

*Continued from page P3*

cific cities will require only a fraction of the space they constructed in the last decade.

In fact, Mr. Birch predicts an enormous drop in demand for "primary" office space (that is, space in office buildings, not in buildings used primarily for some other purpose) in California. Although California led the nation with 265 million square feet of primary office space constructed between 1975 and 1985, Mr. Birch forecasts the state will need only 71 million square feet over the next decade.

"Past gluts have been absorbed fairly quickly by a continued and rapid expansion of the economy," Mr. Birch said. "This one won't be."

If demographic changes were all that America's office developers and investors had to worry about, the situation would be bad enough. Making it worse, however, is the economic restructuring beginning to roll through the white-collar economy.

When economic restructuring hit manufacturing in the early '80s, the office market benefited because a big shift from industrial to office jobs resulted. Now things are different.

"The shift is behind us," said Christopher B. Leinberger, managing partner of Robert Charles Lesser & Co., a real estate consulting firm in Los Angeles.

Statistics compiled by the real estate research department at Salomon Brothers Inc., New York, show white-collar employment growth reached its peak in 1984, with a 7.6% annual rate. By 1987, it had dropped by half, to about 5%, and Salomon's David Shulman is predicting a further 30% drop in the growth rate in 1988.

Beyond a slowing of the economic conversion to office work, however, is the corporate reorganization now sweeping the financial, insurance, and banking industries. "The cost-control ethic is shifting to the white-collar world," Mr. Shulman said.

Though good forecasts are hard to come by, most real estate experts agree offices have lagged far behind factories in improving worker productivity. But as they catch up over the next few years, demand for office space will be severely dampened.

"Part of the reason for corporate reorganization is that there's plenty of room to cut," said Rutgers' Mr. Sternleib.

As the cost-control ethic spreads, it could cut into office demand other ways. With vacancy rates high and rents low, many office businesses have expanded the amount of square footage each worker uses. "A 10% reduction in the amount of space per worker, and you'd have a very ghastly glut of office space," Mr. Sternleib warned.

And because of layoffs and per-worker reductions, a large amount of excess space in offices constructed in the 1980s is likely to hit the sublease market in the early 1990s, driving rents down further.

At the same time, employers are finding cheaper ways to provide space for office workers. Already, some suburban industrial parks are fighting with office buildings for tenants.

"What used to be warehouse or distribution space may start housing office workers at a very low cost," said Larry Wofford, director of research at Office Research Systems, a real estate marketing analysis firm in Tulsa, Okla.

The other possible alternative to the office, of course, is the home. Edgar O. Cheney Jr., a building analyst with United Technologies Corp., Hartford, Conn., has calculated that if 10% (or about 6 million) of America's white-collar work force worked at home, office demand would drop by 1 billion square feet.

Still, Americans have not yet shown a strong inclination to be full-time home workers. The Bureau of Labor Statistics estimates that in 1985, only about 2.2 million people (less than 2% of the labor force) worked at home full time, only half of whom were employed by an outside company.

"The potential to work at home gets overstated," said Bureau economist Frank Horvath. "For many occupations, you spend a good part of your day in meetings, or you're a part of a production team." Yet real estate analysts agree a home office is far less expensive than any other alternative — even if it means buying a bigger house.

It's possible, though perhaps unlikely, some employers will start subsidizing employees who want to operate from home. More likely is a further "decentralization" of the economy into smaller companies; more workers will be their own bosses and could choose to work at home.

But if certain other trends emerge, office demand projections based on demographic changes could be off by a wide margin.

For example, as workers become more scarce, employers probably will turn to people they now deem more marginal. According to Nation's Business, by 2000, 80% of all entrants into the work force will be women, members of minority groups or immigrants, groups whose labor force participation currently is low.

"No longer can you create a ratio that says, 'Because demographic trends say X, demand for office space is going to be Y,'" said Sanford Goodkin, director of real estate for the Peat Marwick/Goodkin Consulting Group, San Diego.

In particular, Mr. Goodkin believes foreign employers, such as the Japanese, might feel less bound by American prejudices in their search for workers.

Nevertheless, the hiring of marginal workers is not likely to offset the space-saving efforts of corporate reorganizers and other trends that will drive down demand for office space in the next decade.

And sooner or later, developers — or, more likely, their lenders — will catch on. So far, office developers have adapted to a world with higher vacancy rates, mostly because office buildings are still valuable as saleable assets.

"Pro formas have changed," said Mr. Leinberger of Robert Charles Lesser. Developers now assume a longer absorption time and set aside more interest reserve to make up the difference, he said.

"The reason they do that is back-end payoff," Mr. Leinberger added. "Offices continue to be investment darlings."

But this attitude isn't likely to last forever.

"A number of our clients are institutional lenders, and I know they're closing their pocketbooks," said Raymond Torto, a principal with Coldwell Banker/Torto Wheaton Services in Cambridge, Mass.

"Ultimately, the space market will determine the value of real estate."

And given the crisis glut that's likely to hit, the market-based value isn't likely to rise very much. ■

# Plan enrollment low

## Public workers slow to accept 401(k) equivalent

By Fred Williams

While a substantial majority of state and local government employers offer the public sector equivalent of a 401(k) salary reduction plan, only a small minority of eligible employees are participating.

According to a recent survey by Buck Consultants Inc., New York, only 16% of eligible employees are enrolled in section 457 plans compared with 79% participation by salaried employees and 59% by non-union hourly employees in 401(k) plans.

"Our survey demonstrates that 457 plans are still in their infancy with respect to employee participation," said Joseph G. Metz, director of governmental legal services for Buck. Mr. Metz said one reason for the low participation levels is that employers are not allowed to make matching contributions.

Section 457 plans permit state and local government employees to shelter from current federal income tax the lesser of 25% of income or $7,500.

Of the 98 public employers surveyed by Buck, 69 offer section 457 plans.

Several public-sector benefit plan executives blame the lack of interest on difficulties in communicating to employees, the diversity of public employers (varying public agencies) associated with a particular plan and the lack or overabundance of investment options.

In Ohio, about 25% of eligible employees are participants in the $650 million plan, according to Ray McLaughlin, executive director of the Ohio Public Employees Compensation Board. Its relatively high participation rate is due to a strong promotional effort by the state, he said.

"I came here from the Arkansas program. There, there was no aggressive marketing or promotion of the plan. It's treated as a fringe benefit and employees almost had to ask for it before it was offered."

"In Ohio, the board chose to expand the program to all employers in the state — now about 500 different political subdivisions, and to promote it aggressively."

Ohio's investment options are a universal life program, a fixed annuity, a variable annuity and six mutual funds ranging from equity growth to income-oriented bonds. The state is seeking additional investment options.

In Texas, the participation rate among eligible employees is only about 7%, said Deborah Powers, plan administrator. Part of the reason might be the $115 million Texas plan offers participants a phenomenal number of managers and investments. Participation is restricted to state employees.

"We are the only plan in the nation that has 140 investment managers to choose from," said Ms. Powers. And with some of the eligible financial institutions offering 10 to 12 investment options, the employee might be overwhelmed, she said.

The number of financial institutions exploded following a 1975 opinion from the Texas attorney general saying the plan could not exclude institutions authorized to do business in Texas and who applied to participate in the program.

Colorado has about 10% participation in its 457 plan, according to Helen Erickson, administrative officer. Colorado's plan also is not available to municipal employees.

Colorado offers participants a savings option at a local savings and loan, Treasury bill and short-term money market options, an annuity program and six mutual funds. A recent survey indicated participants want additional investment options in the equity and fixed-income areas, Ms. Erickson said.

"One reason employees aren't participating fully is that they don't know about the program," she said. "Those that do know seem to really appreciate it."

She said Colorado now contacts each new state employee and provides information about the plan, which has about $50 million in assets.

The $146.6 million Illinois state plan has about a 15% participation rate, said Patrick Foley, spokesman for the Illinois Department of Central Management Services, Springfield.

The Illinois program offers participants six mutual funds. Mr. Foley said a lack of matching contributions from the state probably is the reason for the low participation.

Buck's Mr. Metz said participation levels in 457 plans should begin to increase soon.

"As more funds are established and deposits grow . . . participation will increase. I see a continued refinement of investment strategy and a parallel to the private sector, where 401(k) plans generally supplement and complement defined benefit plans." ■


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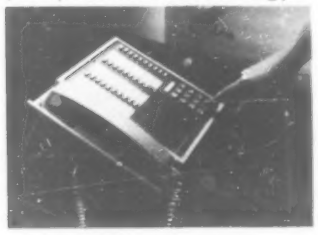

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4/5/88 C2710-2

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PENSIONS & April 4, 1988

# InvestmentAge

The newspaper of corporate and institutional investing $4.50 an issue - $90 a year

Institutional investors are expected to play a key role in the heated proxy battle between Gillette and The Coniston Group.

# Gillette fight to center on institutions

By Marcia Parker

BOSTON — Institutional investors will determine the outcome of the battle between Gillette Co. management and The Coniston Group for control of the company.

The battle is reaching fever pitch as the two sides vie for the votes of pivotal institutional investors, who own 40% to 50% of the shares, at the company's April 21 annual meeting.

The Gillette/Coniston duel is being hailed as the proxy contest of the season. It has all the markings of a classic proxy struggle involving a household-name company and a lesser-known raider.

At the same time, Boston-based Gillette's stock has been climbing recently because the company has been the target of recurring takeover rumors. The stock closed March 30 at 44 per share. Philip Morris Cos. Inc., New York, is considered a potential suitor, but signs of a bidding war have yet to surface.

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PROXY
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***Pensions & Investment Age*'s special look at the issues of the 1988 proxy season continues in Financing — Page 25.**

# Small stocks bounce back

By Joel Chernoff

After 4½ years of severe underperformance, small- and medium-capitalization stocks finally might be rebounding.

Whether the beginning of a long-term turnaround or just a blip, first-quarter returns of small-cap issues nearly tripled those of larger-cap stocks: 13.37% for the Nasdaq industrial index of over-the-counter stocks vs. 4.78% for the Standard & Poor's 500 index.

Some believe a reversal has started, but still have their fingers crossed.

"We think it has (turned around), but of course we thought so in the first quarter of '87," said Robert Zuccaro, president of Stamford, Conn.-based Target Investors Inc., which manages $200 million in small-stock portfolios for pension funds.

While many pension fund executives are studying the issue, only a few are adopting a small-cap bias for their stock portfolios.

"My personal view is that the S&P is not the right portfolio to own at this time," said Robert Shultz, vice president-pension asset management at RJR Nabisco Inc., Atlanta, who oversees the $2.4 billion pension fund.

Mr. Shultz said the average capitalization weighting of the equity portfolio is slightly lower than that of the Russell 3000 index.

Some managers already have altered their portfolios. Jeffrey Diermeier, managing director of First Chicago Investment Advisors, Chicago, said the firm overweighted the small-stock portion of its $2 billion in domestic equity assets starting late last year. Since small stocks started rebounding in December, small companies have corrected 20% to 25% of the underpricing that had occurred since mid-1983, he said.

Many investment experts believe a turnaround in small-cap performance is long overdue. They point to such reasons as the undervaluing of small-cap stocks and overvaluing of larger-cap issues; the cyclical nature historically of small-cap performance; the return of merger activity to the small-cap area; and the demise of technical factors that had buoyed S&P stocks.

Since mid-1983, small-cap issues have greatly underperformed S&P issues. The Russell 2000 index — which includes stocks with capitalizations between $25 million and $300 million — produced a meager compound annual rate of return of 1.4% between July 1, 1983 and Dec. 31, 1987.

By comparison, the larger-cap Russell 1000 index and the S&P 500 returned 12.2% and 13.1%, respectively, during that period.

In the long run, however, small-cap stocks have topped large issues by two percentage points a year from 1926 to 1986, returning 12% against 10% for the S&P 500, according to research by Dimensional Fund Advisors Inc., Santa Monica, Calif.

Since their relative valuation peak in mid-1983, small- and medium-cap stocks have been hurt by a variety of influences, including the rise of indexed stocks, which mostly focus on the S&P 500, and the increase in foreign purchasers, who favor household names that tend to be large-cap stocks.

An analysis by Dennis J. Tritten, a vice president at Frank Russell Co., Tacoma, Wash., showed other reasons for smaller stocks' weaker performance: failure to meet high growth expectations; elimination of lower capital gains tax rates; a recession in the technology sector during 1985 and 1986; and a shift by

*Continued on page 34*

**Small-cap vs. large-cap returns**

| | Russell 2000 | Russell 1000 | S&P 500 |
|---|---|---|---|
| 1/79 - 6/83 | 32.7% | 20.7% | 19.3% |
| 7/83 - 12/87 | 1.4 | 12.2 | 13.1 |
| 1/79 - 12/87 | 16.0 | 16.0 | 16.2 |

Source: Frank Russell Co., Tacoma, Wash.

# Funds buy out firm

## Delaware Management price 3 times revenue

By Joel Chernoff

Some tax-exempt institutional investors will own a piece of Delaware Management Co., the first money management firm to be the target of a leveraged buy-out.

Delaware Management, Philadelphia, is being purchased for about $300 million by the firm's management and Legend Capital L.P., a New York leveraged buy-out fund in which several institutions are limited partners.

Limited partners include the United Technologies Corp. pension fund, Hartford, Conn.; the Massachusetts Institute of Technology retirement fund, Cambridge; and the Brown University endowment fund, Providence, R.I. Other investors include Chemical Bank, New York; Manufacturers Hanover Trust Co., New York; Prudential Insurance Co., Newark, N.J.; Security Pacific National Bank, Los Angeles; Toronto Dominion Bank, Toronto; Primerica Inc., Greenwich, Conn.; and Irving Trust Co., New York.

The highly leveraged purchase of Delaware Management, which manages $13 billion in institutional assets and $5 billion in mutual fund assets, is pending approval by the boards and shareholders of the company's 16 mutual funds.

The price tag for Delaware Management shows there is significant interest in buying high-quality firms despite last year's stock market crash and weaker prospects for growth in the pension market.

Price multiples paid for money managers declined to 1.7 times revenue at year-end 1987 from a peak of 5.4 around March 1987 (*Pensions & Investment Age*, March 7).

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## LATE NEWS

### JMB buying Celanese building

NEW YORK — JMB Institutional Realty Corp., Chicago, has an agreement with the Royal Dutch Shell Pension Fund Foundation, The Hague, Netherlands, to acquire the 1.7 million-square-foot Celanese building in midtown New York for approximately $340 million.

JMB's commingled funds Group Trust IV and Endowment and Foundation Limited III will finance about 51% of the purchase; separate account clients are to finance the remainder. At press time, it was not known what separate account clients had committed to the deal.

### 3rd partner leaves Brignoli firm

NEW YORK — Duane Roberts, partner, has left Brignoli, Curley & Roberts Associates, effective last week.

He is the third partner to leave; Jac Curley left the firm in December and James Karanfilian, in January. Their departures were due to "philosophical differences" with Richard Brignoli, the other partner and majority owner, on the operation of the firm, Mr. Roberts said. Their plans are undecided, he said.

Brignoli Models Inc., of which Mr. Brignoli is president, has a controlling interest in Brignoli, Curley & Roberts. Brignoli Advisers Inc., a subsidiary of Brignoli Models, will take over marketing and client servicing for Brignoli, Curley & Roberts, said William M. Morris, partner in Brignoli Models and president of Brignoli Advisers.

Both Brignoli, Curley & Roberts and Brignoli Advisers market quantitative equity strategies developed by Brignoli Models. Brignoli, Curley & Roberts runs $800 million in tax-exempt assets. Brignoli Advisers manages $200 million in corporate cash in a stock index arbitrage strategy. All the firms are in New York.

### Executive joins Rogers, Casey

STAMFORD, Conn. — Paul H. Fullum, formerly head of direct investment for Progressive Corp., Cleveland, will become managing director-investment supervision at Rogers, Casey & Barksdale Inc., effective Tuesday.

Mr. Fullum could not be reached for comment by press time.

### Asset manager changes reported

• Two corporate pension funds have made their first commitments to overseas investments, while a third fund hired its first active international manager.

The $246 million pension fund of Burroughs Wellcome Co., Research Triangle Park, N.C., allocated $24 million to a separately managed, non-domestic equities account with Bankers Trust — Investment Management Group, New York, said Glenn Andrews, assistant vice president-finance.

In addition, Burroughs Wellcome moved $28.5 million to the RESA commingled open-end real estate fund managed by The Phoenix, Hartford, Conn., the fund's first real estate investment.

The $200 million pension fund at Pittston Corp., Greenwich, Conn., made its first international allocation, hiring Oechsle International Advisors, Boston, to manage an undisclosed amount, according to a company spokesman.

Funding for the manager will come from cash. SEI Funds Evaluation Services, Wayne, Pa., served as consultant.

Meanwhile, Schering-Plough Corp., Madison, N.J., hired Scudder, Stevens & Clark, New York, to manage $20 million as the $367 million fund's first active international equity manager, according to Candice Cox, director-trust investments.

Schering-Plough has invested in an international index fund managed by Chase Investors Management Corp., New York, for five years. The latest hire brings international investment to 11% of the fund's total assets.

Assets came from cash and reducing existing accounts, primarily equities. The search was conducted internally.

• WASHINGTON — The $1.1 billion District of Columbia Retirement Board has hired two minority-owned investment management firms to run $10 million each, according to Adrian Anderson, acting executive director for the fund.

NCM Capital Management Group Inc., Durham, N.C., will manage a fixed-income account, while Greaves/INVESCO, Atlanta, will run an equity portfolio. Both have been hired as part of an effort to establish a farm team of minority firms, and each could be given more funds to manage in the future, Mr. Anderson said.

• CHICAGO — The Quaker Oats Co. has hired three value managers to invest a portion of its $375 million pension fund.

Barrow, Hanley, Mewhinney & Strauss Inc., Dallas; Lehman Management Co., New York; and Miller, Anderson and Sherrerd, Bala Cynwyd, Pa., will manage equal amounts, according to Susanne Abosch, a financial analyst at Quaker. Ms. Abosch would not say how much each manager would receive.

The assets came from a manager termination made more than a year ago, she said.

Institutional Capital Corp., Chicago, and Sanford C. Bernstein & Co., New York, also manage equities for Quaker Oats.

## DEPARTMENTS


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Vol. 16, No. 7 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1988.

Norton Reamer

# UAM owner aims high

By Carol Wiley

**BOSTON — Norton Reamer isn't going to rest until United Asset Management Inc. owns at least 5% — better yet, 10% — of the institutional money management industry.**

**Considering the $25.5 billion United Asset Management has under management is only about 1%, he's just scratched the surface of an industry he estimates at $3 trillion.**

**"There's so much more to be done," he said. "We don't yet have any real estate firms or international firms. We could have several. We don't even have a firm in the city of New York. There are so many**

*Continued on page 33*

# Execs leave old posts for new ventures

## 4 choose different avenues

Several executives of large corporate pension funds recently have announced job changes.

• William H.S. Preece Jr. has resigned as director-corporate finance at Kraft Inc., Glenview, Ill., effective the end of this month. His plans are undecided.

• Judith W. Mares, who for most of the 1980s oversaw the pension investments at General Mills Inc., Minneapolis, and more recently was its assistant treasurer-international finance, has left the food products concern to become managing director of the investment group of Norwest Capital Resources, the institutional trust division of Norwest Bank, Minneapolis.

• Jack Miller has left his position as director of investments at Eli Lilly & Co., Indianapolis, to direct the investment of the pension plans of Philip Morris Cos. Inc., New York, and its subsidiary, General Foods, White Plains, N.Y. Although the assets probably will not be merged, they will for the first time be overseen at the parent company level by one person.

• R. Barry Thomas, assistant treasurer of Union Pacific Corp., New York, will become a consultant with Rogers, Casey & Barksdale Inc., Stamford, Conn., effective April 11.

Mr. Preece said he wants to return to specialization in pension investing, either with a plan sponsor or money management firm, and suspects he will wind up at the latter.

At Kraft, he had become more of a generalist in corporate financial matters, although he continued to oversee the company's $1.7 billion in employee benefit assets, he said. His successor has not been named yet.

With the company since 1981, one of the highlights of his tenure was the split of Dart & Kraft Inc. into Kraft and Premark International Inc. in 1986. "We put a very big fund together and pulled part of it apart," he said.

Ms. Mares is filling a new position at Norwest, according to Stan K. Medina, vice president and executive director. She will report to him.

She will oversee $2 billion of discretionary institutional investments and manage 12 professionals, composed of eight portfolio managers and four product managers, he said.

General Mills hasn't decided whether to replace Ms. Mares, ac-

*Continued on page 34*

**William H.S. Preece Jr. is leaving Kraft Inc. at the end of the month.**

# Active equities sizzle

## $537.5 million in new business reported

By Trudy Ring

Active equity management outdrew indexing in the first quarter of 1988, while real estate and international bonds were popular alternative investments.

Of manager hirings reported in *Pensions & Investment Age* during the quarter, active equity management attracted $537.5 million. For domestic-stock indexing, only one $45 million account and two accounts of undisclosed size were reported.

These and other figures are based solely on reports published in *P&I Age* during the quarter; there might have been other were not publicized.

Real estate equity drew $329.4 million, while a hybrid venture capital-leveraged buy-out fund that will focus on real estate products attracted $185 million.

In international and global investing, bonds attracted $150 million, plus two accounts described as less than $100 million each. A total of $46 million went to actively managed international equities and $58 million to international stock-index funds. There also was $52.5 million channeled to international/global balanced management.

Annuities accounted for $180 million, all in a move by Mellon Bank, Pittsburgh, to cover some of its pension liabilities. Mellon bought the annuities from Equitable Life Assurance Society of the United States, New York.

Other asset classes that reported drawing money in the quarter were venture capital,

*Continued on page 33*

**Most new accounts* 1st quarter 1988**

| Firm | New accounts |
|---|---|
| Union Labor Life Insurance | 6 |
| HGM Associates | 4 |
| Avatar Associates | 3 |
| Equitable Real Estate | 3 |
| Metropolitan Life | 3 |
| JMB Institutional Realty | 3 |
| Worldinvest | 3 |

* As reported in *Pensions & Investment Age*

**Most new assets* 1st quarter 1988**

| Firm | $ mils. |
|---|---|
| HGM Associates | 185 |
| Equitable Life Assurance | 180 |
| TCW Asset Management | 170 |
| Fidelity Management Trust | 90 |
| J&W Seligman | 80 |
| JMB Institutional Realty | 68 |
| Boston Co. | 60 |
| Equitable Real Estate | 55 |

* As reported in *Pensions & Investment Age*

PORTFOLIO MANAGEMENT

# Model signals shift in style

By Barry B. Burr

Energen Corp. and Puritan Bennett Corp. plan to boost the equity exposure of their pension funds in June, tilting toward a growth style.

The signal for the change comes in part from a tactical equity tilting model that is based on the relative performance of investment managers grouped by style.

Sponsors and consultants typically use style performances as benchmark measures to evaluate the results of their own managers with their peers. But Energen and Puritan Bennett, led by their consultant, Spectrum Advisory Corp., Chicago, go beyond that. They use the data to make equity allocation decisions.

Spectrum developed the two-step model, which determines a fund's equity exposure and how that exposure should be tilted between two equity styles, value and growth.

Because the two steps in the model are independent of each other, Spectrum could make shifts between equity styles without changing the overall equity exposure, or vice versa, although changes also could be made in tandem. Depending on the signals, the model might recommend shifts every quarter.

For the equity style tilting, Spectrum tracks the relative performance of 1,500 equity managers, broadly grouping them into either style. The more one style outperforms the other, the more assets the Spectrum model recommends be shifted to the style out of favor.

Robert Moseson, president and chief executive officer of Spectrum and its sibling company Performance Analytics Inc., claims both tactical shifts — the equity exposure and the equity style mix — add a total of 700 to 800 basis points a year over a static allocation.

Last year, for example, its clients' total returns for their pension funds averaged 10.3% (ranging from 9.4% to 14.3%). By comparison, 3.7% was the median return of several hundred other pension fund clients Performance Analytics tracks. These clients do not use the Spectrum allocation model. In contrast, the median pension fund in SEI Corp.'s universe returned 3.9% last year.

He attributed 200 basis points of the total added to the style tilt and the remainder to the equity exposure.

"You have to have good growth and value managers," he said. "Once you do that, the rest of the process is easy."

Performance Analytics provides performance comparison services. Spectrum makes the equity shift recommendations but does not manage money, although it is a registered investment adviser, Mr. Moseson said.

According Mr. Moseson, the allocation is based on the expectation that each equity style typically moves through cycles of under- and overperformance relative to each other. The Spectrum model attempts to capture most of the superior performance, while reducing the commitment before the style underperforms.

The style performances tell only where to place the equity bets; not how much money to place in equities overall.

For the overall equity exposure signal, Spectrum uses the market price-to-book value of the Standard & Poor's 400 stock index, in conjunction with the trends in performance by style.

Mr. Moseson said Spectrum advises the tactical shifts for 12 pension funds and one profit-sharing fund, ranging in size from $20 million to $700 million. In all, he said the clients have some $2 billion in assets following the allocation strategy. He disclosed the names of only two clients, the $60 million pension fund of Energen, Birmingham, Ala., and the $30 million pension fund of Puritan Bennett, Overland Park, Kan.

"Overall, we were happy" with the performance last year, said Walter E. McMahon, Energen's director-treasury operations.

"We have not gone back to see how we would have fared without Performance Analytics. But we certainly have done better than we would have under our old method."

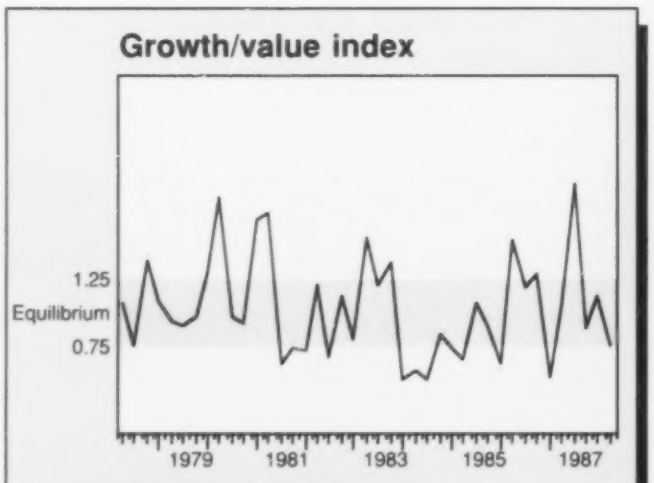
At Puritan Bennett, Lee Robbins, chief financial officer, added, "At this point we're very pleased with their performance."

Until Energen hired Spectrum and Performance Analytics in December 1986, Mr. McMahon said the fund was kept for years in a static mix of bonds, equities and cash, all run by Equity Capital Management Corp., a unit of Equitable Life Assurance Society of the United States, New York.

In December 1986, Energen stripped Equitable of its equity assignment and hired Newbold's Asset Management, Philadelphia, and Stein Roe & Farnham Inc., Chicago.

Initially, Energen, following the advice of Spectrum, allocated

*Continued on page 23*




Source: Spectrum Advisory Corp.

FEATURE

# 1987 earnings weak

**David L. White is executive vice president of Invista Capital Management Inc., Des Moines, Iowa**

By David L. White

An issue that has been troubling me recently is corporate earnings. Specifically, they look too low.

The Standard & Poor's 400 stock index earnings for 1987 came in a little more than $20 per share after languishing around $16 for almost a decade. I think normal earnings for 1987 should have been closer to $30 per share. If I'm right, this has very important implications for the stock market and sectors within the market, given the importance of earnings in determining absolute and relative values.

Let's look at the history of corporate earnings from one business cycle peak to the next. Table 1 lists earnings for the S&P 400 starting with the 1957 economic peak and also lists the compound annual rate of growth in earnings adjusted for inflation from the previous cyclical peak. Excluding the unusual 1957 to 1960 cycle, the average rate of real growth in earnings was 3.8%. This compares with a −2.2% real growth rate in the most recent cycle from 1979 to 1987. In other words, unlike recent experience, it is customary to make progress in real corporate earnings from one cycle to the next.

Assuming normal real growth of 3.8% per year during the 1979 to 1987 period, earnings in 1987, after adding back inflation, would have been $32.80, not $20.40. Even if real growth had been only 2.4%, which was the lowest real growth of the four cycles, 1987 earnings would have been $29.40, again well above the actual $20.40 earned last year.

Problems with cyclical companies' earnings became evident as the economy began recovering from the last recession in late 1982. The high dollar short-circuited the normal economic recovery by causing imports to increase and exports to grow at a below-normal rate. Peak earnings for many cyclical companies still date to 1979 or 1978, despite 1987 being the sixth year of the economic recovery.

Unfortunately, many analysts only focus on the past five years, so they conclude earnings potential for many cyclical companies is hopeless.

Our economic system, however, rarely penalizes large and important parts of the economy forever. After all, Americans continue to consume increasing amounts of real goods, which ultimately puts demands on capital goods and basic industries. Now that the dollar is quite low, it does appear the fortunes of these industries are changing.

To grasp the potential of this important segment of our economy, it is necessary to go back before the sharp rise in the dollar, in other words, before 1982.

*Continued on page 22*

**TABLE 1**

| Year of economic peak | S&P 400 earnings | Peak to peak annual growth of real earnings |
|---|---|---|
| 1957 | $3.53 | 4.9%* |
| 1960 | 3.40 | −3.2 |
| 1969 | 6.13 | 3.5 |
| 1973 | 8.89 | 4.5 |
| 1979 | 16.29 | 2.4 |
| 1987 | 20.40 | −2.2 |

* Compared to 1953

**TABLE 2**

| | Return on equity 1965-'81* | Return on equity 1987 | Normal p/e |
|---|---|---|---|
| Cyclicals | | | |
| Machinery | 16.1% | 4.6% | 8.1 |
| Industry | 16.3 | 9.3 | 9.5 |
| High Tech | 19.5 | 3.4 | 7.4 |
| Non-cyclicals | | | |
| Major growth | 21.5 | 24.6 | 17.6 |

* Average

**TABLE 3**

| | Earnings Actual | Earnings Peak | Peak/actual |
|---|---|---|---|
| 1975 | $ 8.58 | $10.92 | 1.27 |
| 1979 | 16.29 | 17.49 | 1.07 |
| 1982 | 13.20 | 19.52 | 1.48 |
| 1987 | 20.40 | 30.26 | 1.48 |

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# '87 earnings

*Continued from page 21*

Table 2 compares the return on equity for a sample of companies representative of the S&P 400 for the 1965-'81 period with 1987 and also with the companies' normal price-earnings ratio. Average return on equity for cyclical companies was considerably higher from 1965 to 1981 than it was in 1987. Return on equity must improve significantly just to get to average conditions experienced from 1965 to 1981. If the 17-year period is representative of normal conditions, it is legitimate to multiply that period's return on equity by current book value to arrive at normal earnings. Remember, these are normal earnings, not peak earnings.

Contrast the cyclical companies with the non-cyclical ones — drug, soft drink and consumer-goods companies. Their 1965-'81 average return on equity is less than it was in 1987, just the opposite of the cyclical companies. That means normal earnings for these non-cyclical companies are less than current earnings, therefore, their normal p/e ratio is quite high. For most consumer-goods companies, current return on equity exceeds historical return. This makes sense because they have had an exceedingly favorable environment the past five years. It is difficult to imagine the next five years treating them as kindly. Not so for basic industry, machinery and equipment, and high-technology companies.

Another method of determining if reported earnings are normal is to compare the past peak earnings per share for the S&P 400 on an individual basis rather than for the index as a whole, as done in Table 3.

The past peak is constructed by taking the peak earnings of each company and weighting them according to the S&P 400. The past peak rises in each of the four years as the companies report new earnings highs as the economy advances.

When the economy is at its peak, actual earnings for each of the four years and past peak earnings should be about the same. When the economy is doing poorly, the difference should be wide.

For 1975, a recession year, the spread between actual and peak was wide: actual earnings needed to go up 27% to equal peak levels. In 1979 the economy peaked, so actual and peak earnings were almost identical. By 1982, the bottom of the last recession, actual earnings needed to go up 48% to match peak earnings. Although peak and actual earnings have risen nicely from 1982 to 1987, the gap between them remains as wide as it was in 1982.

Peak and actual earnings have continued to rise because the consumer sector of the economy has done quite well. The capital-goods oriented companies by contrast have done quite poorly; therefore, the gap between peak and current earnings has not closed.

What implications can be drawn from this analysis?

Current earnings are too low by a substantial margin. The 1987 earnings for the S&P 400 were about $10 too short of what they should have been under normal conditions. Because the normal level of earnings is about $30 not $20, the S&P 400's multiple is 11 not 16. Value judgments using a p/e ratio of 16 are incorrect.

Earnings for many consumer companies are too high and will surprise most investors by staying near current levels for several years. Earnings of the capital-goods companies will expand very rapidly.

Return to normal profits might not occur before the economy slips into a recession. However, I do think normal earnings will be achieved within the next five years. When reported and normal earnings converge, the stocks of capital-goods companies, broadly defined, and small companies will provide above average appreciation. ■

A special report on the best-managed companies in the U.S. will be published in the May 2 issue of *Pensions & Investment Age*.

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FEATURE

# 'Pills' up premiums

## Study defends anti-takeover strategies

By John Wilcox

A new study has found poison pills are fulfilling their stated purpose of increasing target managements' bargaining power to maximize shareholder value, which suggests investment managers operating under Employee Retirement Income Security Act guidelines should support the implementation of these shareholder rights plans by corporations.

The Georgeson & Co. Inc., New York, study of hostile tender offers concludes target companies protected by poison pills command substantially higher takeover premiums than companies without them.

Georgeson examined 47 corporations that were the subject of hostile tender offers between Jan. 1, 1986, and Oct. 1, 1987. About half of these target companies had shareholder rights plans at the time of the takeover.

The study showed companies with poison pills received final offers averaging about 75% above their price six months before the bidding wars began, compared with only about 55% average gain for unprotected companies.

Because some of these gains were the result of the strong bull market during the period covered by the study, the results also were analyzed to adjust for changes in the Standard & Poor's 500 stock index average. The analysis showed final bids for companies with poison pills outperformed the S&P 500 by an average of 50%, while companies without poison pills beat the index by only 30%.

So, adjusted for changes in the S&P 500, premiums for companies protected by pills averaged only 50% greater than companies without poison pills. These results indicate shareholder rights plans add significant value for shareholders in hostile takeovers.

Shareholder rights plans are highly controversial.

Proponents claim the plans prevent takeover abuses, give bargaining power to corporate managements and shareholders faced with hostile takeover bids, provide a balancing mechanism against speculative market forces (particularly risk arbitrageurs) activated by hostile takeovers and, ultimately, result in higher prices for shareholders. The Georgeson study supports at least the last of these contentions.

The primary arguments against poison pills are that they are undemocratic because shareholders do not vote on implementation of the plan and that they have a chilling effect that prevents hostile takeovers from occurring and thereby deprives shareholders of takeover premiums.

In response, most proponents argue rights plans are legally within the power of corporate boards of directors to implement. The courts have, in most cases, upheld the plans.

A few proponents have gone further and claimed the lack of voting rights on poison pills is defensible because, in the context of tender offers, shareholders do not have voting rights with respect to changes of corporate control. In effect, this argument says that because federal law does not permit shareholders to vote on tender offers, it is equally appropriate they cannot vote on poison pills.

The claim that poison pills prevent takeovers is difficult to quantify or statistically validate. Circumstantial evidence, however, suggests poison pills do not prevent takeovers. The Georgeson study shows there were almost as many hostile takeovers for targets with poison pills as for targets without them. Furthermore, during the period since late 1985 when poison pills were first given court approval in the Household Finance case, mergermania has continued unabated (except for a brief period following the market crash).

Poison pill plans proliferated during this period while hostile takeover activity was undiminished. These facts provide evidence poison pills do not inhibit takeovers.

Despite this evidence, there is a

*Continued on page 27*

### Impact of poison pills

| Without poison pill | Price* | Final bid | Price % change | Takeover premium** |
|---|---|---|---|---|
| Accuray | 26.125 | 45.00 | 72.25% | 74.20 |
| Avondale Mills | 14.500 | 28.20 | 94.48 | 52.75 |
| Conrac | 15.000 | 27.50 | 83.33 | 50.13 |
| Fruehauf | 23.375 | 49.50 | 111.76 | 53.44 |
| JWT Group | 28.750 | 55.50 | 93.04 | 57.73 |
| Penn Traffic | 14.063 | 31.60 | 124.71 | 67.23 |
| **With poison pill** | | | | |
| Allied Stores | 37.625 | 69.00 | 83.39% | 69.22 |
| Burlington Industries | 36.000 | 78.00 | 116.67 | 73.53 |
| Chemlawn | 17.750 | 36.50 | 105.63 | 74.71 |
| Clevite | 7.000 | 16.50 | 135.71 | 96.14 |
| Harper & Row | 24.000 | 65.00 | 170.83 | 132.38 |
| Kenner Parker Toys | 20.500 | 51.00 | 148.78 | 109.18 |
| Lamaur | 13.333 | 28.50 | 113.75 | 79.44 |
| Lear-Siegler | 55.500 | 92.00 | 65.77 | 57.46 |
| Purolator | 18.000 | 40.00 | 122.22 | 92.70 |
| Safeway Stores | 36.250 | 69.00 | 90.34 | 69.42 |

* 6 months before first bid
** Relative to S&P 500
Source: Georgeson & Co. Inc., New York

John Wilcox is managing director of Georgeson & Co. Inc., New York.

# Proxy fights taking shape

By Marcia Parker

It's that time of year again when institutional shareholders and company management either tango or duel over a wide range of proxy resolutions that are the focal point of corporate America's annual meeting rite.

With the first annual meetings less than a month away, institutional stockholders are being bombarded with persuasive pleas. Institutional investors and proxy solicitors are seeking support for their respective positions on everything from divestment in South Africa to barring greenmail payments to raiders.

The pleas come in the form of a barrage of phone calls, solicitation letters and newspaper ads; all tout the viewpoints of institutional investors, corporate raiders and corporate managements locked in battle over proxy contests and tender offers.

This year, many institutional investors are targeting the proxy voting system itself, with scores of resolutions calling on companies to adopt confidential balloting and to give all shareholders equal access to the proxy statements. Others are sponsoring proxy resolutions asking companies to rescind or put to a shareholder vote anti-takeover defenses.

These institutions — led by the California Public Employees' Retirement System, the California State Teachers' Retirement System, the New York City Retirement Systems and the Teachers Insurance and Annuity Association-College Retirement Equities Fund — hope to build on the qualified success they achieved last year as sponsors of a host of proxy resolutions. While none of the resolutions passed, they won considerable support from other shareholders. Observers predict institutional sponsors will do even better this year.

The 1988 annual meeting season also is being spiced up by hostile tender offers.

Two of the hottest contests are The Coniston Group's run at the Gillette Co. and Bank of New York attempting a takeover of Irving Bank Corp. Coniston and Bank of New York have launched proxy contests and are seeking the election of their slates of directors at the April 21 annual meetings of both Gillette and Irving.

FEATURE

# Votes under microscope

## Avon letter sets process

By Robert Monks and Nell Minow

The Department of Labor's first formal statement on the obligations of ERISA fiduciaries with regard to proxy voting will have a seismic effect on the way the ownership aspects of ERISA funds are exercised.

The department's statement came in the form of a Feb. 23 letter to Avon Products Inc., New York, whose proxy voting procedures were under investigation (*Pensions & Investment Age*, March 7). In the letter, Deputy Assistant Secretary Alan D. Lebowitz made it clear that ownership powers, including proxy voting, are an asset of the plan and must be exercised for the exclusive benefit of plan participants. The only acceptable consideration is the continued viability and strength of the plan.

David Walker, assistant secretary of labor, noted in a recent speech to the members of the United Shareholders Association that to comply with this statement, ERISA fiduciaries with voting authority must have written policies governing proxy voting (*P&I Age*, Feb. 22).

They must evaluate all options, including proxies, by weighing the costs and the benefits. All votes must be documented, along with the reasons.

According to the first major study of how pension plans handle proxy voting, published last year by the Employee Benefits Research Institute, many companies that have their pension plans managed by outside firms do not even know if the proxies are being voted (*P&I Age*, Sept. 21).

Nell Minow is general counsel at Institutional Shareholder Services, Inc., a Washington-based firm advising institutional investors. Robert Monks is president of the firm.

More than 60% of the small plans with equity assets of less than $25 million reported they do not vote at all. Those who allow their outside managers to vote exercise very little oversight: 98% said they never or rarely gave voting instructions; less than a quarter of sponsors with external managers attempted to coordinate the voting of the managers; and 68% did not know if their managers ever cast contradictory votes.

Even though proxies voted by internal managers were more likely to be overseen by plan sponsors and more likely to be subject to written guidelines on voting, EBRI found they were just as likely to be voted inconsistently as those voted by outside managers.

Under the Labor Department's new standard, proxy votes cast inconsistently because of negligence in communicating and applying policies are simply unacceptable.

In the past, few plans have made an effort even to match the shares held on the record date with the proxies received. It is clear these plans are not only required to do so, but that it must be documented.

There will be instances when a

*Continued on page 27*

# Proxy votes

*Continued from page 25*

fund manager or a bank is acting in different capacities with regard to different sections of a portfolio. (All relationships under the Employee Retirement Income Security Act must be in writing.)

The plan documents must be analyzed carefully to determine who has the fiduciary obligations with regard to ownership.

For example, a bank might be operating as a master trustee, a custodian, a trustee of pooled funds, or an ERISA fiduciary. All of these functions have different implications and impose different obligations on the bank. The distinctions are particularly important with regard to who can and who cannot advise on proxy issues.

The documentation must extend beyond verifying that all shares were voted. For non-routine matters, it also must demonstrate the supporting analysis.

Even matters that might appear routine, such as election of unopposed directors, might raise fiduciary issues.

If director candidates have a record of approving actions contrary to shareholders' interests, either in the company for which they are a candidate or other companies, fiduciaries might be required to vote against them. At the very least, they must be able to justify that their action meets the same standards of prudence and reasonableness accorded to other aspects of asset management.

Special documentation will be required for any issue not covered by the written guidelines, or any deviation from those written guidelines.

Banks and outside asset managers will be presented, from time to time, with potential conflicts of interests.

At a bank, the loan department might try to influence the plan manager to vote for management of a good customer, even if it is contrary to the interests of the pension plan's beneficiaries. An asset manager can be pressured by other clients.

Any contacts from individuals inside or outside the organization with regard to proxy voting or tender offers or other ownership issues must be noted for the record. Policy guidelines must make provisions for these cases.

In most instances, it will be sufficient to comply with the written guidelines, which might create a per se standard of prudence and reasonableness. In some cases, however, an independent fiduciary might be required.

The policy statement issued by the Labor Department has gone very far in making clear the obligations of a fiduciary under the Employee Retirement Income Security Act with regard to proxy voting. But the policy statement also raises two important questions that remain unresolved.

The first concerns the obligations of an ERISA fiduciary for other aspects of ownership. These aspects include more activist endeavors. When must a fiduciary propose a shareholder resolution, for example?

A forthcoming law bulletin article written by Morton Klevan, the director of policy development and evaluation, Pension and Welfare Benefits Administration, compares ERISA fiduciaries to common law trustees, who must view rights such as a cause of action for a lawsuit as an asset of a plan, and must therefore take action when it is prudent and reasonable to do so. Policy guidelines for voting proxies should also contain criteria for evaluating other options available to the shareholder.

The second issue the policy statement raises concerns the obligations of other fiduciaries who manage assets, public pension plans and assets held under the Investment Company Act, for example.

A case could easily be made the same concerns exist and the same standards apply. The statement issued by the Labor Department sets an important precedent that will lead to changes in those areas as well. ■

# Study

*Continued from page 25*

common assumption that poison pills are not in the best interests of shareholders. During the 1987 proxy season, more than 30 corporations faced shareholder-sponsored proposals calling for rescission of poison pills or submission of the plans to approval by shareholder vote. In 1988, these proposals again will be on the ballot.

On the basis of the Georgeson study, serious questions arise as to whether the poison pill rescission proposals themselves may be against the interests of shareholders.

ERISA proxy voting guidelines were issued in a Feb. 23 letter to Avon Products Inc. signed by Alan D. Lebowitz, deputy assistant secretary of labor (*Pensions & Investment Age*, March 21). In light of the Georgeson study, it is arguable that fiduciaries are violating ERISA requirements if they fail to support poison pill plans or if they seek to have them rescinded.

Although the bulk of Mr. Lebowitz's letter deals with procedural matters relating to the delegation of voting responsibilities, a footnote describes "substantive requirements" for proxy voting by fiduciaries.

The key wording states a fiduciary of a plan must act "... for the exclusive purpose of providing benefits to participants and beneficiaries."

To act prudently in the voting of proxies (as well as in all other fiduciary matters), a plan fiduciary must consider those factors which would affect *the value of the plan's investment*." (emphasis added).

The last sentence of this footnote explicitly prohibits a fiduciary "... from subordinating the interests of participants and beneficiaries in their retirement income to *unrelated objectives*" (emphasis added).

The Georgeson study suggests that in hostile takeovers, poison pills help maximize value for shareholders. Evidence that poison pills prevent takeovers or otherwise interfere with shareholders' ability to obtain premiums is non-existent. Furthermore, circumstantial evidence indicates poison pills do not prevent takeovers.

Thus the only justification for a fiduciary objecting to poison pills is on grounds of principle — i.e., an objection to the "undemocratic" lack of shareholder voting rights when the plans are implemented.

Objection on principle, however, would appear to be an "unrelated objective," which is barred from consideration by fiduciaries under the footnote of the Lebowitz letter. ■

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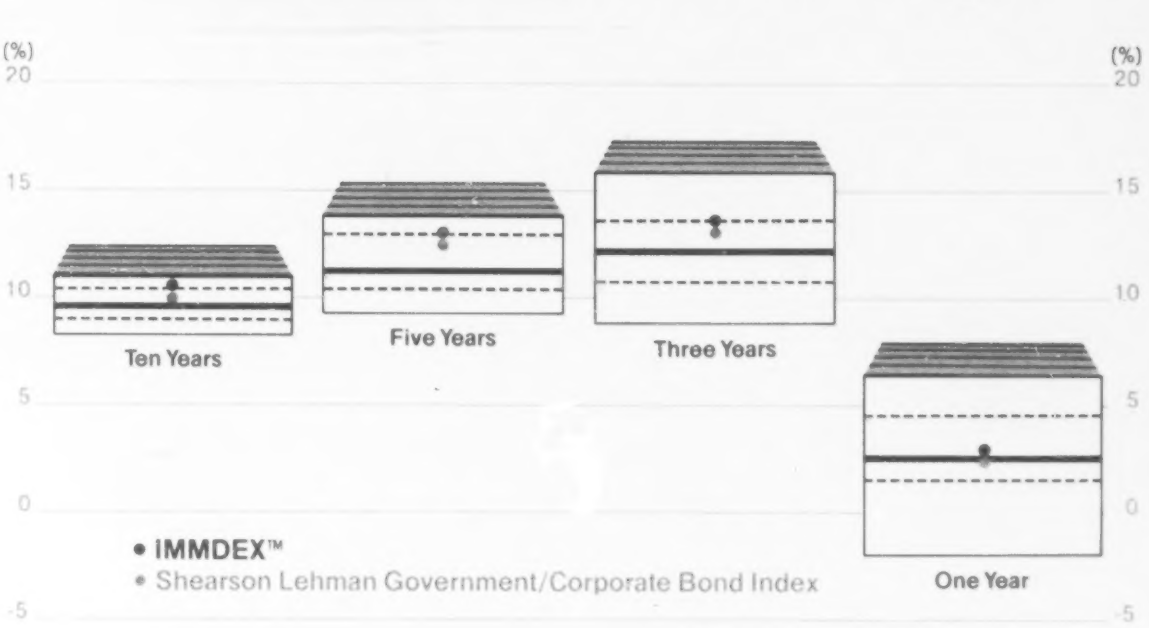


Bond fund total rates of return for periods ended December 31, 1987. Source SEI.

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PENSIONS & **April 18, 1988**

# Investment Age

The newspaper of corporate and institutional investing **$4.50 an issue · $90 a year**

# Street ups trading costs

## 6 months later

By Barry B. Burr
and Joel Chernoff

Since the October market crash, execution costs on principal, institutional trades have risen while brokerage costs for the easier agency trades have fallen, decreasing the attractiveness of soft-dollar services, among other side effects.

Lower equity trading volume and greater uncertainty about volatility generally have made trading more difficult; widening bid/ask spreads and increasing caution among dealers about committing capital to trades have added to execution costs.

Equity trading executives at Allen & Co., Bear Stearns & Co., First Boston Corp. and Goldman, Sachs & Co., all of New York, said their companies have raised costs for principal trades since October, but all declined to provide specific figures.

At Goldman, Sachs, Dexter Earle, vice president, said, "For principal trades, our (commission) rates have gone up and spreads have widened."

Luis S. Mendez, First Boston managing director, said, "Commission rates are up in relation to principal trades because liquidity is less. On agency trades, commission costs are lower. I can tell you right now I'm not having any luck raising (agency) commissions."

Rates "are definitely more for principal" trades, said William Mitchell Jennings, Bear Stearns managing director.

Brokerage commissions have fallen on average for agency trades as more brokerage firms fight to maintain as much revenue as possible in the face of declining market volume.

**A look at how pension fund asset allocation, the breadth and depth of the stock market and the state of hedging strategies have changed six months after Black Monday — Page 3.**

Unlike the others interviewed, Mr. Jennings said his company also has raised average commission rates "a little" for agency, or brokered, trades where dealers act only as agents and commit no capital.

Off-market institutional trading networks — Instinet Corp.'s Crossing Network and the BARRA Inc. and Jefferies & Co. Inc.'s Portfolio System for Institutional Trading — claim to have gained volume in the last two quarters; representatives, however, won't release specific figures. Commissions are 1 cent a share for the Crossing Network; and 1 to 2 cents for POSIT. Trades are done at the closing price, having no market impact.

With trading volume down since October, brokerage industry executives noted managers that pay for services by channeling trading commissions to designated brokerage companies face a squeeze. Managers have to cut back on such services, or devote a larger share of their trades to generate soft dollars, leaving fewer trades to dedicate solely to execution considerations.

A study by SEI Corp., New York, found that during the fourth quarter, excluding the extraordinary trading

*Continued on page 53*

# CFO salaries climb: 1 earns $900,000-plus

By Marcia Parker

Courtney F. Jones, who earned $902,400 at Merrill Lynch & Co. in 1987, is the highest paid chief financial officer among more than 100 public companies sampled by *Pensions & Investment Age*.

Thomas O. Thorsen's salary of $875,500 at The Travelers Cos. garnered him the No. 2 spot. Textron Inc.'s Dennis G. Little was third, with $770,361, the highest-paid chief financial officer among about 20 Fortune 100 companies in the survey.

All three men hold the dual titles of executive vice president and chief financial officer.

At well-known companies, W. Keith Smith, a vice chairman and chief financial officer of Mellon Bank Corp., was among the lowest paid: He earned $188,514 last year, of which $133,514 was salary and $55,000 was bonus. Some chief financial officers of smaller, regional banks earned less.

Bethlehem Steel Corp.'s Gary L. Millenbruch was the lowest paid at Fortune 100 companies in the survey. He earned $283,750 as senior vice president and chief financial officer.

Data for the survey came from the companies' proxy statements, which list the companies' five most highly compensated executives. Public companies must report that information to the Securities and

*Continued on page 54*

***P&I Age*'s special focus on the changing world of the chief financial officer continues on Page 13.**

# Young plans in bind over funding limits

By Nicky Robertshaw

WASHINGTON — The new full-funding limit for pension funds is giving executives at Digital Equipment Corp. and other companies a headache.

Digital, which has been lobbying heavily for relief from the law that prohibits tax-deductible pension contributions once the assets reach 150% of current liabilities, is typical of companies most vulnerable to problems under the law.

The company has a young work force, with a median age of 34; it has experienced significant growth in profits and numbers of new employees; and out of 67,000 participants, it has only 1,000 retirees.

Because current liability does not take into account projected benefit obligations, Digital would be precluded from contributing to its pension plan for the next four to six years, said Crace L. Hinchman, manager of public affairs for Digital's Washington office.

The market value of Digital's pension assets was $758 million as of September 1987; the projected liabilities were $592 million. Contribution data were not available.

"While we've been (funding the plan based on projected benefit obligations) because we believe it is our responsibility to fund today, Congress has precluded us from doing that," Ms. Hinchman said. "Now we're going to have to pay for future benefits in the future, when we don't know if we'll be as healthy."

She added the policy is at odds with the mandate of the Employee Retirement Income Security Act to fund consistently over time, and has the effect of penalizing companies that are healthy and are adding to their work forces.

While the problems faced by young funds such as Digital's

*Continued on page 53*

**Digital Equipment, a leading provider of computer network systems, would not be able to make contributions to its pension plan for at least four years under new full-funding rules.**

## INSIDE

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## LATE NEWS

### Wheeling-Pitt plans still unsettled

WASHINGTON — The $85 million settlement in principle between the PBGC and Wheeling-Pittsburgh Steel Corp. on the agency's claims in the steelmaker's bankruptcy proceedings still leaves unresolved the issue of whether any new plans the company establishes would be illegal follow-on pension plans.

Under the terms of the settlement, Wheeling-Pittsburgh will pay $60 million in cash to the Pension Benefit Guaranty Corp. upon confirmation of its plan of reorganization by a federal bankruptcy court and $25 million in the form of a note payable six years after the initial distribution.

"We believe it is a fair and equitable settlement for both sides," said an attorney for Wheeling-Pittsburgh, adding he hoped the settlement was a harbinger of the PBGC's being somewhat accommodating on the issue of the steelmaker's new pension plans. A court hearing on the replacement plans will be held in June; a temporary benefit plan expires in August.

Royal S. Dellinger, PBGC deputy executive director, said the settlement is significant because, among other reasons, it reinforces the priority of the agency's claims for the employer contributions due to the plans between bankruptcy filing and the termination of the plans.

### Arnott leaving Salomon Brothers

NEW YORK — Robert D. Arnott is leaving Salomon Brothers Inc. after a year as vice president and strategist to become president and chief investment officer of First Quadrant Corp., a Morristown, N.J., in-house investment unit of Crum & Forster Inc., an insurance company whose ultimate parent is Xerox Corp., Stamford, Conn.

First Quadrant has no outside clients. Robert M. Lovell Jr., who was promoted to the new position of chairman from president, said Mr. Arnott's task will be to develop institutional business, overseeing both marketing and investment strategy. First Quadrant now runs $6 billion in Crum & Forster assets, all in fixed income except about $700 million in equities; its only other assets come from two Xerox-related accounts and total $70 million in equities, Mr. Lovell said.

Salomon executives were unavailable for comment.

### Landauer unit spinoff possible

NEW YORK — Landauer Associates Inc. could spin off its institutional investment management unit as part of a possible restructuring being discussed by management and the three foreign institutional owners of the real estate services company.

Landauer executives plan to meet April 19 to discuss various restructuring possibilities. Spinning off the advisory unit, Landauer Advisors Inc., "is certainly a conceivable option," a source said. The source added, however, if Landauer Advisors were spun off, Barings Inc., London, probably would become sole owner of the unit, although management could be asked to participate in the buy-out.

Baring, along with Hilliar Parker, London, and Societes Bordais, Paris, own 70% of Landauer Associates. Landauer's management owns the remaining 30% of the firm, which also operates valuation and financing units.

Landauer Advisors runs $712 million in real estate assets, of which $113 million is tax exempt.

### Funds announce asset moves

• HARTFORD, Conn. — The $4 billion pension fund of United Technologies Corp., Hartford, Conn., has committed between $5 million and $20 million to the CERF II closed-end real estate investment fund managed by CIGNA Investment Inc., Hartford, said Frances M. Crimbly, director-pension investments.

• HARTFORD, Conn. — The $5.8 billion State of Connecticut Trust Funds has taken a novel approach to active international stock investing, relieving four new managers of the regional asset allocation responsibility by splitting assets among Pacific Basin accounts and European accounts, according to Frank P. McDermott, assistant treasurer-investments.

Hired to manage $25 million each were: Nomura Capital Management Inc., New York, and Schroder Capital Management International Inc., New York, for Pacific Basin portfolios; and Fidelity International Investment Advisors, Boston, and Capital Guardian Trust Co., Los Angeles, for European portfolios.

The fund also added $50 million to a $100 million international passive stock account with Boston International Advisors Inc., Boston.

• MINNEAPOLIS — The $340 million Cargill Inc. pension fund has committed $20 million in undisclosed amounts to three commingled real estate funds — the Property Fund III closed-end fund managed by Lehndorff & Babson Real Estate Counsel, Dallas; the closed-end Realty Fund V managed by TCW Realty Advisors, Los Angeles; and the open-end Real Estate Equity Fund of First Asset Realty Advisors, Minneapolis.

## DEPARTMENTS


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Vol. 16, No. 8 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1988.

# KKR refinances LBO with mortgage sale

## Jim Walter deal could become model

By Brad Rudin

In what could become a model for the long-term financing of other leveraged buy-outs, Kohlberg Kravis Roberts & Co. used a $1.45 billion sale of mortgage assets to pay down bank debt associated with the firm's buy-out of Jim Walter Corp.

Jim Walter, which markets standardized single-family homes, was acquired by KKR in a $2.3 billion leveraged buy-out last year.

The transaction marks the first time financial assets such as mortgages were sold to take out leveraged buy-out bank debt.

"KKR reasoned that the marketplace, in evaluating the stock of Jim Walter Corp., was not properly evaluating the assets of Mid-State Homes, which is the mortgage finance subsidiary of Jim Walter," said Peter E. Hoey, a senior vice president with Financial Security Assurance Inc., New York, which provided a surety bond that guarantees noteholders the full payment of interest and principal.

The FSA guarantee shaved off about 75 basis points from the coupon, Mr. Hoey said, adding the net saving to the issuer was about half that amount because of the premium paid to FSA.

FSA required collateralization in excess of 20%, or about $1.75 billion, in mortgages to secure $1.45 billion of notes.

If the collateral were liquidated in the event of default, investors would be protected from the risk of accelerated payment by a defeasance structure that calls upon FSA to buy high-quality securities whose cash flow would satisfy the principal and interest payments due on the notes.

An AAA rating from Moody's Investors Service and Standard & Poor's Corp. was a condition for issuance of the notes.

The mortgage-backed notes were issued by Mid-State Trust II, which was created by Mid-State Homes Inc. Salomon Brothers Inc. was lead manager of the public offering while Drexel Burnham Lambert Inc. served as co-manager.

Mid-State Homes acts as servicing agent for the mortgage collections, getting an annual fee of $240 for each of the 74,298 accounts collateralizing the notes.

KKR reportedly first attempted to sell the notes in a private placement led by Drexel, but abandoned that course after the deal received a cool reception from Prudential Insurance Co. of America, which was going to buy a large portion of the deal.

The public offering, priced earlier this month, appeals to a wide range of investors because it

*Continued on page 49*

**Peter Hoey noted the market didn't properly evaluate Jim Walter's mortgage subsidiary.**

# Surge due for growth stocks

By Curtis Vostl

**Many growth managers, outperformed in recent years by nearly every other equity investment style, say it's their time to shine.**

**Overshadowed in the frenzy of arbitrage and the bull market, analysts say a combination of factors — including low valuation, a slowdown of foreign investment in blue-chip stocks and the normal pendulum effect — will help growth stocks emerge as stars in the near future.**

**Others are cautious about the turnaround, saying its duration might be short-lived if there is a recession.**

**But for now, growth managers and analysts are almost giddy with first quarter performance that shows growth stocks outperforming the Standard & Poor's 500 stock index by at least 180 basis points.**

**"This is the first time in five years that growth managers can hold their heads high," said Keith Stransky, vice president at Evaluation Associates Inc., Norwalk, Conn. "It's a good feeling."**

**Mr. Stransky said EAI's research shows growth managers earned 7.5% to 8% in the first quarter,**

***Continued on page 50***

# Funds dumped shares before Black Monday

By Nicky Robertshaw

WASHINGTON — Pension fund executives and their money managers did most of their stock selling before Black Monday, the Employee Benefit Research Institute reported.

Indeed, private trusteed pension funds sold just 1% of all directly held equity holdings between Oct. 1 and Dec. 31 — a net of $5 billion — compared with net sales of $14 billion during the third quarter and $34 billion during the first three quarters of 1987, EBRI data showed.

(Directly held stocks are those purchased outright, rather than shares held through investments in pooled or mutual funds.)

EBRI's study, released last week, is one of the first objective indicators of pension fund behavior during last year's volatile stock market.

Dallas Salisbury, president of the Washington-based EBRI, said the findings parallel those of the Brady Commission, which concluded pension funds were not a significant player when the Dow Jones industrial average plunged 508 points Oct. 19.

(There were exceptions, however, including the pension fund of General Motors Corp., New York — which sold $1 billion in equities — and users of portfolio insurance and other derivative instruments.)

EBRI's findings also reinforce those of SEI Funds Evaluation Services: Purchases represented 51.3% of the dollars traded by investment managers in SEI's universe during the five, heavier-than-usual trading days between Oct. 15 and Oct. 21.

"This supports the conclusion of the Brady Commission that much of the net selling during this period was conducted by portfolio insurers and mutual funds, and generally not pension funds," said the report by SEI of Wayne, Pa.

Mr. Salisbury said pension funds likely sold more stock before the crash than after because they sold "when they had capital gains to make, but not in the fourth quarter when they would have taken losses . . . Why take capital losses when you're in it for the long term?"

He also speculated that pension executives feared the bull market had run its course.

Industry observers were not

*Continued on page 51*

### Asset mix of trusteed pension funds*

| | Equity | Bonds | Cash | Other |
|---|---|---|---|---|
| 4th qtr. '83 | 36 | 18 | 12 | 33 |
| 4th qtr. '84 | 35 | 19 | 11 | 34 |
| 4th qtr. '85 | 36 | 18 | 10 | 35 |
| 4th qtr. '86 | 37 | 18 | 8 | 36 |
| 1st qtr. '87 | 40 | 16 | 9 | 35 |
| 4th qtr. '87 | 36 | 17 | 9 | 37 |

* Might not total 100 because of rounding.

Source: EBRI Quarterly Pension Investment Report

CHIEF FINANCIAL OFFICERS

# A new breed for complex times

## More status comes with added duties

By Marcia Parker

Corporate America's chief financial officers are playing a more dynamic role in the core management team today, a reflection of their changing jobs, rising status and demand from other company executives for their input on key business and strategic decisions.

The deregulation and globalization of the capital markets, keen international competition, the rise of financial engineering, merger and acquisition mania, tangled tax laws and the emphasis on highly active asset management all have combined to make top management rely more on the chief financial officer for insight. That in turn makes the job broader, more difficult and more challenging.

"The challenges make a CFO gray," quipped Jules Zimmerman, group vice president-finance and chief financial officer of Avon Products Inc., New York.

Interviews with more than 12 chief financial officers found each approaches his or her job differently and the jobs vary widely by company. More and more of them are in the five most highly compensated executives group and have added other titles including vice chairman and director, reflecting their higher status.

All agree they have more responsibility, manage bigger staffs and are increasingly involved in all aspects of corporate decision-making.

Restructuring projects and activities related to mergers and acquisitions are taking up a lot more of their time today. They say the most difficult part of their job is keeping abreast of the rapidly changing world.

Responding to those changes, the Financial Executives Institute, whose members include about 1,000 chief financial officers, is trying to meet its members' needs by offering seminars and articles in its publications on topics that reflect the financial officer's increasingly broad interests and duties. In the months ahead, conferences are scheduled on Wall Street's volatility, the aftermath of Black Monday, corporate restructuring and mergers and acquisitions, and information management.

"The role hasn't changed as much as the environment has changed," said H. Clark Jr., executive vice president and chief financial officer at American Express Co., New York. "There's the changing financial markets, globalization and new financial instruments, complexity of U.S. and foreign tax laws, accounting changes, investment opportunities and credit quality concerns."

The whole world is more complex and more volatile, compared with the stability of years past, said William H. Springer, vice chairman and chief financial and administrative officer at American Information Technologies Corp., Chicago. "The challenge is to maintain the energy level. There's an awful lot of reading, traveling, communicating," Mr.

*Continued on page 14*

### Starting salaries — chief financial officers/treasurers

| Company $ volume in millions | 1988 | 1986 | 1984 |
|---|---|---|---|
| 10-50 | $46,000-$66,000 | $42,000-$63,000 | $39,000-$60,000 |
| 50-250 | 59,000-86,000 | 55,000-85,000 | 53,000-83,000 |
| 250-750 | 77,000-120,000 | 74,000-116,000 | 69,000-111,000 |
| 750 + | 104,000-170,000 | 100,000-164,000 | 97,000-160,000 |

Source: Robert Half International Inc., New York

### 1987 top financial executives' salaries

**Companies with sales of more than $6 billion**

| | Mean | Median |
|---|---|---|
| Base salary | $268,105 | $265,000 |
| Bonus as % of base | 52 | 55 |
| Total compensation | $411,773 | $388,182 |
| Age | 52 | 51 |
| Company service | 15 | 13 |

**Sales of $3 billion to $6 billion**

| | Mean | Median |
|---|---|---|
| Base salary | $248,073 | $248,625 |
| Bonus as % of base | 53 | 54 |
| Total compensation | $384,185 | $352,500 |
| Age | 52 | 52 |
| Company service | 14 | 12 |

**Sales of $1 billion to $3 billion**

| | Mean | Median |
|---|---|---|
| Base salary | $216,802 | $200,000 |
| Bonus as % of base | 38 | 36 |
| Total compensation | $307,896 | $277,300 |
| Age | 52 | 53 |
| Company service | 16 | 14 |

**Sales of $500 million to $1 billion**

| | Mean | Median |
|---|---|---|
| Base salary | $168,357 | $165,000 |
| Bonus as % of base | 29 | 30 |
| Total compensation | $219,381 | $203,995 |
| Age | 49 | 50 |
| Company service | 10 | 9 |

**Sales of less than $500 million**

| | Mean | Median |
|---|---|---|
| Base salary | $124,703 | $120,000 |
| Bonus as % of base | 28 | 26 |
| Total compensation | $161,170 | $144,658 |
| Age | 47 | 46 |
| Company service | 12 | 11 |

Source: Towers, Perrin, Forster & Crosby Inc.

### A sampling of chief financial officer salaries

**Fortune 100**

Anheuser-Busch Cos. Inc.
Jerry E. Ritter
Vice president, group executive & chief financial officer
$376,008*

Bethlehem Steel Corp.
Gary L. Millenbruch
Senior vice president & chief financial officer
$283,750

The Boeing Co.
H.W. Haynes
Executive vice president, chief financial officer & director
$568,009

Honeywell Inc.
Louis E. Navin
Vice president, chief financial officer, administrative officer; director
$438,406

Pfizer Inc.
Jean-Paul Valles
Vice president-finance
$426,911

PPG Industries Inc.
Robert H. Mitchel
Vice president-finance
$225,000*

Textron Inc.
Dennis G. Little
Executive vice president & chief financial officer
$770,361

Time Inc.
E. Thayer Bigelow
Chief financial officer
$732,500

Unocal Corp.
Claude S. Brinegar
Executive vice president & chief financial officer
$482,167

Weyerhaeuser Co.
Robert L. Schuyler
Executive vice president & chief financial officer
$400,000

Whirlpool Corp.
James R. Samartini
Executive vice president & chief financial officer
$330,367

**Other companies**

American Information Technologies Corp.
William H. Springer
Vice chairman, chief financial & administrative officer
$310,000*

Armco Inc.
W.B. Askins
Executive vice president & chief financial officer
$319,234

Avery International Corp.
Philip M. Neal
Senior vice president-finance & chief financial officer
$267,000

Aetna Life and Casualty Co.
Donald G. Conrad
Executive vice president & chief financial officer
$616,384

Cincinnati Bell Inc.
Dennis J Sullivan Jr.
Executive vice president & chief financial officer
$326,495

Cummins Engine Co. Inc.
John T. Hackett
Executive vice president & chief financial officer
$286,538

The Walt Disney Co.
Gary L. Wilson
Executive vice president & chief financial officer; member of the board of directors
$500,000

Haverty Furniture Cos. Inc.
Leonard O. Gay
Executive vice president & chief financial officer; director
$283,828

Hershey Foods Corp.
M.F. Pasquale
Vice president-finance & chief financial officer
$172,500*

First Boston Corp.
Henry G. Geier
Treasurer of First Boston Inc., vice president & comptroller of First Boston Corp.
$250,000

The Lubrizol Corp.
W.T. Bergie
Senior vice president-finance
$301,036

Merrill Lynch & Co. Inc.
Courtney F. Jones
Executive vice president & chief financial officer
$902,400

Pennzoil Co.
N.J. Luke
Group vice president-corporate finance & accounting
$427,000

Reynolds Metal Co.
R. Bern Crowl
Executive vice president & chief financial officer
$305,500*

Schlumberger Ltd.
A. Lindenauer
Executive vice president-finance & chief financial officer
$455,100

The Sherwin-Williams Co.
T.R. Miklich
Senior vice president-finance & chief financial officer
$274,231

J.P. Stevens & Co. Inc.
John J. Zerrenner
Senior vice president-finance & chief financial officer; member of the executive committee
$203,651*

VF Corp.
J.M. Wiggins
Vice president-finance & chief financial officer
$280,000

Warner Lambert Co.
Robert J. Dircks
Executive vice president & chief financial officer
$470,750

Quantum Chemical Corp.
Francis L. Brophy
Senior vice president & chief financial officer
$235,000*

United States Surgical Corp.
Bruce S. Lustman
Executive vice president-finance & chief financial officer
$559,000

The Travelers Cos.
Thomas O. Thorsen
Executive vice president & chief financial officer; director
$875,500

* Receives other bonus

Source: The 1987 salary data were taken from the 1988 proxy statements. The data are not available for every Fortune 100 company.

# A new breed

*Continued from page 13*

Springer said. "You're involved every hour of every day. There's a broad base of people to supervise. You have to keep abreast of what's going on inside and outside the business, you've got to keep in front of the pack."

Today the chief financial officer has to wear a number of hats. The CFO must help analyze mergers and acquisitions, be adept at finding creative and cost-efficient ways of raising money in capital markets worldwide, manage foreign exchange exposure, oversee the investment of huge pension funds and corporate cash, fashion tax strategies, constantly monitor and measure corporate asset performance, spot poor performing assets and dispose of them, and much more.

The financial officer also has to track interest rates and currency fluctuations, keep up with international trade issues and global stock market developments, spot windows for financing throughout the world, master an array of financial instruments, and be able to assess the financial implications of business decisions. To juggle all these diverse duties, agility is a plus.

"There are a whole myriad of products coming off the street that they have to be up to speed on," said Ted Jadick, partner with Heidrick & Struggles Inc., New York, an executive recruitment firm.

Job qualifications — both academic credentials and practical experience — have increased as the work of the chief financial officer has become more complex, he said.

"Now you're finding that the stronger CFOs have undergraduate degrees, MBAs and they come up through the treasury side where they are interfacing with the financial community," Mr. Jadick said. In the past, chief financial officers came to the job with an undergraduate degree in accounting and a background on the control side of the business.

Among the biggest challenges those interviewed cited is the array of financial instruments that can be tapped when companies need to raise money.

"The CFO always had to provide financing sources for the company. But it used to be you'd go to your investment banker and get a 25-year bond," Avon's Mr. Zimmerman said. "All the borrowing was the same plain-vanilla, fixed-rate type. Now the nature of the financial products out there requires expertise in currency and interest rate swaps and many other areas."

Others, however, contend the technical demands on chief financial officers can be overstated.

"I find that most CFOs I've dealt with don't tend to get too technically involved," said David Blair, president of Bushell Blair & Associates, a New York-based executive search firm. "I've heard so many managers at the $100,000 level-plus say, 'At my level, you understand, I don't need to know these things.' "

Maria Monet, chief financial officer at Ogden Corp., New York, and president of Ogden Financial Services, spends a good deal of her time developing innovative financing vehicles for Ogden resource recovery plants and other Ogden subsidiaries.

All the financial officers interviewed said hiring the best and the brightest staffs they can find goes a long way toward making their jobs easier.

D.W. Russler, senior vice president-finance and administration, and chief financial officer, NCR Corp., Dayton, Ohio, said the competition for the best and the brightest is getting tougher. "It's a very competitive environment. The competition from companies, big eight accounting firms, and U.S. industry is fierce," he said.

"No CFO is totally qualified to do it all," Avon's Mr. Zimmerman said. "You get the best people." ■

*Brad Rudin contributed to this story.*


# Kemper retires some old ideas about 401(k)s.

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# Suit filed over loss in crash

KANSAS CITY, Mo. — Utilicorp United Inc. is seeking $11.8 million in damages from Kemper Financial Services Inc., Chicago, claiming the money manager did not liquidate a stock portfolio prior to the October crash as instructed.

The suit states Kemper, which managed approximately $20 million in a separate account for a Utilicorp pension fund, was instructed to liquidate $8 million Oct. 14 and to transfer the cash Oct. 21 to The United Missouri Bank of Kansas City, Utilicorp's master trustee.

The suit states Kemper failed to follow through and the trustee received only $2 million Oct. 21. The suit states Kemper delayed the process, liquidating $2 million Oct. 20, $3 million Oct. 21 and $3 million Oct. 22.

According to the lawsuit, Kemper later misrepresented the dates on which the liquidation took place.

Utilicorp's employee benefit assets total approximately $45 million and consist of seven defined benefit plans.

The suit asks for actual damages of $1.8 million — the amount the utility claims it lost by the delay — and $10 million in punitive damages.

Kemper officials denied the mishandling, saying they were not given instructions regarding the redemption until the day the market crashed.

Charles Kierscht, president of Kemper, said the utility "did tell us Oct. 14 that $8 million would be moving to another manager and that the other manager would contact us regarding the transfer.

"The new manager didn't contact us until the close of business Oct. 19 and said he would take cash" instead of securities, Mr. Kierscht said. "We liquidated over the next three days, and I can't understand why the lawsuit was filed."

Bank officials and the bank's attorney would not comment on the lawsuit.

Steve Cochennet, senior manager-administration at Utilicorp, referred questions to the company's attorney, William H. Sanders, who is a partner with the Kansas City law firm of Blackwell, Sanders, Matheny, Weary & Lombardi.

"They were told to sell," Mr. Sanders said. "It's not up to the manager to tell them.

"They were told to sell by Utilicorp, and they agreed to sell, and the new manager did call and left his name that day," he said.

United Missouri Bank filed the suit on behalf of the company in U.S. District Court in Kansas City. ■

FINANCING

# Debt-for-stock swap pulls Savin to safety

## Bankruptcy threat dissolves with offer

By Brad Rudin

STAMFORD, Conn. — Savin Corp. stepped back from the brink of bankruptcy late last month after creditors agreed to a revised exchange offer in which debt will be swapped for convertible preferred stock.

With the exchange offer almost in place, Savin can look forward to a healthier balance sheet and the prospect of an alliance with an innovative business partner.

The copier distributor's earlier offer to swap debt and preferred stock for common stock ran into resistance from creditors, who balked at the prospect of turning in their bonds for a junior security.

"Some people criticized us for initially printing an offer that basically said that all debt has to go to common stock," said Ralph O. Hellmold, managing director and head of the workout group at Prudential-Bache Capital Funding, New York, which serves as Savin's financial adviser. "I learned a long time ago that if you don't ask for something aggressive you have no hope of ending up with something realistic."

Because the exchange offer calls upon Polysar Energy & Chemical Corp., Toronto, a major Savin shareholder, to swap notes totaling $77.1 million for preferred stock, the deal prevents the bankruptcy petition that would have followed if Polysar demanded for payment on the notes. Polysar's agreement to swap its debt for preferred stock is contingent on an 85% exchange of increasing-rate notes for preferred stock.

**"Two years ago the company lost . . . $36 million to $40 million from operations and the share price was about 7. A year ago we lost $9.2 million from operations and share price was 3 or 3¼. Now we finally show a profit for the first time in seven years and my shares are selling for a quarter. Give me a break."**

**— David G. Sadler**
**Chairman and CEO**

The exchange offer, formulated with the help of Prudential-Bache, follows by two years an offer completed under the guidance of another financial adviser. In that offer, Savin replaced long-term debt with shorter-term obligations.

Because the zero-coupon bonds created in the earlier exchange could be converted into common stock and because interest on other debt could be paid in common stock, the number of outstanding shares increased to 60

*Continued on page 32*

# Activity returns with new strength

By Brad Rudin

NEW YORK — Breaking out of its long-held position in the middle of the bulge bracket, Merrill Lynch Capital Markets Inc. grabbed the biggest share of the first quarter's expanding underwriting business.

Total domestic volume rose to $67.9 billion in the first quarter, up 58% from the $43.1 billion level reached in the last quarter of 1987, according to IDD Information Services Inc., New York. Still, underwriting volume is much lower than the $89.5 billion figure recorded in the first quarter of last year.

The generally improving stock market encouraged a 34% increase in common stock underwritings to $7.7 billion in the first quarter from $5.8 billion in the fourth quarter of 1987. The volume of initial public offerings tripled to $7.1 billion in the first quarter of 1988 from $2.4 billion the previous quarter, according to IDD data.

A bond market rally in the first half of the first quarter fueled debt underwriting activity. The rally gave issuers "the most attractive financing opportunities in medium- and long-term maturities in two years," according to the Feb. 12 issue of Comments on Credit, a Salomon Brothers Inc. publication.

Industrial issuers have been encouraged to tap the debt market because of the positive economic news released during the first quarter, said Peter Skaperdas, a vice president in Salomon's fixed-income research unit.

Although the bond market fizzled in the middle of the first quarter, the financing environment for issuers remained relatively favorable because spreads against Treasuries remained tight, Mr. Skaperdas said. "We still think it's a favorable environment for issuers."

The expanding volume of public offerings accompanied a wider sharing of underwriting business. The top five firms did 65% of the domestic underwriting business in the first quarter compared with 70% in the fourth quarter of 1987.

Displacing Salomon, the traditional leader in the underwriting league tables, Merrill Lynch took 17.2% of all first-quarter domestic underwriting business. Salomon, which finished the quarter in second place, did 14.3% of the business. Third-place Goldman, Sachs & Co. took a

*Continued on page 33*

# 1st quarter underwriting rankings (Full credit to lead manager)

### All issues - global*

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Merrill Lynch | 13,782.9 | 11.3 |
| 2. First Boston/CSFB** | 11,111.8 | 9.1 |
| 3. Salomon | 10,204 | 8.4 |
| 4. Goldman, Sachs | 8,715.3 | 7.1 |
| 5. Morgan Stanley | 7,963.1 | 6.5 |
| 6. Shearson Lehman | 5,113.6 | 4.2 |
| 7. Deutsche Bank | 4,709.4 | 3.9 |
| 8. Nomura | 4,348.9 | 3.6 |
| 9. Drexel Burnham | 3,621.8 | 3 |
| 10. Daiwa | 3,584.3 | 2.9 |

* All taxable issues, debt and equity, worldwide
** First Boston/Credit Suisse First Boston
Source: IDD Information Services, New York
Last quarter rankings not available

### All issues - domestic*

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Merrill Lynch (4) | 11,718.6 | 17.2 |
| 2. Salomon (2) | 9,752.7 | 14.3 |
| 3. Goldman, Sachs (1) | 8,188.1 | 12 |
| 4. First Boston (3) | 7,565.9 | 11.1 |
| 5. Morgan Stanley (5) | 7,350.7 | 10.8 |
| 6. Shearson Lehman (6) | 4,659.2 | 6.9 |
| 7. Drexel Burnham (7) | 3,621.8 | 5.3 |
| 8. Bear, Stearns (9) | 2,877.7 | 4.2 |
| 9. Prudential-Bache (10) | 2,646.3 | 3.9 |
| 10. Wheat, 1st Securities (11) | 2,000 | 2.9 |

* All taxable issues, debt and equity, sold in U.S. only
Source: IDD Information Services, New York
Numbers in parentheses show last quarter's rankings

### All issues - domestic*

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Merrill Lynch (4) | 7,995.9 | 19.4 |
| 2. Salomon (2) | 5,240.6 | 12.7 |
| 3. Goldman, Sachs (1) | 4,552.3 | 11 |
| 4. Morgan Stanley (5) | 4,451.1 | 10.8 |
| 5. First Boston (3) | 4,440.6 | 10.8 |
| 6. Shearson Lehman (7) | 3,209.3 | 7.8 |
| 7. Drexel Burnham (6) | 2,681.8 | 6.5 |
| 8. Wheat, 1st Securities (9) | 2,000 | 4.8 |
| 9. Smith Barney (11) | 1,774.6 | 4.3 |
| 10. Prudential-Bache (13) | 1,140.8 | 2.8 |

* All taxable issues, debt and equity, excluding mortgage-related and agency issues sold in U.S. only
Source: IDD Information Services, New York
Numbers in parentheses show last quarter's rankings

### All debt issues

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Merrill Lynch (3) | 9,764.9 | 16.8 |
| 2. Salomon (1) | 9,289 | 16 |
| 3. Goldman, Sachs (2) | 7,650.5 | 13.2 |
| 4. Morgan Stanley (5) | 7,225.7 | 12.5 |
| 5. First Boston (4) | 6,882.9 | 11.9 |
| 6. Drexel Burnham (7) | 3,256.4 | 5.6 |
| 7. Shearson Lehman (6) | 3,096.1 | 5.3 |
| 8. Bear, Stearns (9) | 2,877.7 | 5 |
| 9. Prudential-Bache (10) | 1,894 | 3.3 |
| 10. Smith Barney (12) | 1,864.3 | 3.2 |

Source: IDD Information Services, New York
Numbers in parentheses show last quarter's rankings

### Non-investment grade debt

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Drexel Burnham (2) | 1,754.8 | 41.5 |
| 2. Morgan Stanley (3) | 877 | 20.8 |
| 3. Smith Barney (NA) | 498.1 | 11.8 |
| 4. Bear, Stearns (NA) | 228.1 | 5.4 |
| 5. Prudential-Bache (NA) | 222.1 | 5.3 |
| 6. DLJ (NA) | 220 | 5.2 |
| 7. Salomon (NA) | 165 | 3.9 |
| 8. Kidder, Peabody (5) | 134.3 | 3.2 |
| 9. Merrill Lynch (4) | 125 | 3 |

Source: IDD Information Services, New York
Numbers in parentheses show last quarter's rankings

### Mortgage-related debt

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Salomon (4) | 4,512.1 | 17.6 |
| 2. Goldman, Sachs (1) | 3,616.2 | 14.1 |
| 3. Merrill Lynch (2) | 3,224 | 12.6 |
| 4. First Boston (6) | 2,831 | 11.1 |
| 5. Morgan Stanley (13) | 2,701.5 | 10.6 |
| 6. Bear, Stearns (5) | 2,185.7 | 8.5 |
| 7. Prudential-Bache (9) | 1,505.5 | 5.9 |
| 8. Shearson Lehman (3) | 1,449.9 | 5.7 |
| 9. Kidder, Peabody (7) | 1,083.4 | 4.2 |
| 10. Drexel Burnham (8) | 940 | 3.7 |

Source: IDD Information Services, New York
Numbers in parentheses show last quarter's rankings

### Initial public offerings

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Wheat, 1st Securities (1) | 2,000 | 27.8 |
| 2. Merrill Lynch (6) | 1,371.6 | 19.1 |
| 3. Shearson Lehman (15) | 1,315.1 | 18.3 |
| 4. PaineWebber (32) | 1,025.2 | 14.3 |
| 5. Prudential-Bache (7) | 680 | 9.5 |
| 6. Drexel Burnham (8) | 286.5 | 4 |
| 7. First Boston (5) | 150 | 2.1 |
| 8. Goldman, Sachs (13) | 127.6 | 1.8 |
| 9. Salomon (NA) | 65 | 0.9 |
| 10. Alex. Brown & Sons (2) | 31.2 | 0.4 |

Source: IDD Information Services, New York
Numbers in parentheses show last quarter's rankings

### Common stock

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Wheat, 1st Securities (2) | 2,000 | 25.9 |
| 2. Shearson Lehman (14) | 1,563.1 | 20.2 |
| 3. Merrill Lynch (8) | 1,403.6 | 18.2 |
| 4. PaineWebber (10) | 1,033.3 | 13.4 |
| 5. Prudential-Bache (9) | 752.3 | 9.7 |
| 6. Drexel Burnham (11) | 286.5 | 3.7 |
| 7. First Boston (5) | 150 | 1.9 |
| 8. Goldman, Sachs (1) | 127.6 | 1.7 |
| 9. Salomon (6) | 110.2 | 1.4 |
| 10. Hambrecht & Quist (NA) | 53.1 | 0.7 |

Source: IDD Information Services, New York
Numbers in parentheses show last quarter's rankings

### Preferred stock

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Merrill Lynch (NA) | 550 | 24.3 |
| 2. First Boston (NA) | 533 | 23.6 |
| 3. Goldman, Sachs (2) | 410 | 18.1 |
| 4. Salomon (NA) | 353.5 | 15.6 |
| 5. Morgan Stanley (1) | 125 | 5.5 |
| 6. Oppenheimer (NA) | 100 | 4.4 |
| 7. Drexel Burnham (NA) | 79 | 3.5 |
| 8. Smith Barney (NA) | 60 | 2.7 |
| 9. DLJ (NA) | 25 | 1.1 |
| 10. Interstate Securities (3) | 15 | 0.7 |

Source: IDD Information Services, New York
Numbers in parentheses show last quarter's rankings

# High-yield bond defaults rocket; Texaco role key

By Brad Rudin

Swollen by the bankruptcy of Texaco Inc., the default rate of high-yield bonds almost doubled to 6.7% in 1987 from about 3.4% the previous year, according to a report by Morgan Stanley & Co. Inc., New York.

Excluding the Texaco bankruptcy, the 1987 default rate "was an unexceptional 1.215%," according to the report. Texaco accounted for $6.6 billion of the $8.2 billion of defaulting debt.

Morgan Stanley's report adds more data to a debate sparked by a General Accounting Office hearing last month on high-yield securities. The hearing was in response to congressional concerns about the impact of high-yield securities on corporate takeovers and the risks to federal insurance funds for federally insured deposit institutions that invest in the securities.

Representatives from Standard & Poor's Corp., the U.S. League of Savings Institutions and the Alliance for Capital Access — a group of companies that favors open access to high-yield financing — testified at the hearing. Edwin Altman, a professor at New York University, and other members of the business and academic communities also testified.

Morgan Stanley was not represented at the hearing.

The firm's report, an update of high-yield market research, assesses the risks and rewards associated with high-yield bonds and suggests strategies that would maximize investor returns.

Default loss-rate data present a more accurate picture of the risk associated with high-yield securities than straight default rate data because the numbers reflect the price of the bond after default, according to the Morgan Stanley report.

High-yield investors experienced a default loss rate of slightly more 2.9% in 1987 compared with a cumulative average default loss rate of about 1.5% during the period from 1974 to 1986.

Pointing to the rewards of high-yield bond portfolio management in a bear market, Morgan Stanley noted low-rated bonds outperformed long-term Treasury securities by 712 basis points last year.

Morgan Stanley suggests in its report managers use low-rated securities to diversify the risks of an interest-rate sensitive portfolio because high-yield bonds are less sensitive to interest rate movements than other securities.

At the GAO hearing in Washington, Gail I. Hessol, a managing director at New York-based Standard & Poor's, said the default rate will increase in the next four years. Companies that have low-rated debt because of restructurings have not shown up in default statistics yet, Ms. Hessol noted. "It is only a matter of time before potential problems materialize for some," she said.

Martin S. Fridson, a principal in the credit research group at Morgan Stanley, said in an interview that predictions of substantial increases in the high-yield default rates could not be established. "I really don't know. We're in new territory," he said. ■

# Twist added to offering

NEW YORK — Building on its successful introduction of inflation-linked bonds, Morgan Stanley & Co. added a put option to its second offering of the new product.

The deal — popular among pension fund managers — sold quickly despite the novelty of the product, said Richard J. Rogalski, a vice president in the new products group at Morgan Stanley who also is a professor of finance at the Amos Tuck School of Business Administration, Dartmouth College.

Morgan Stanley this month was lead manager for a $100 million offering of inflation-linked bonds, called Real Yield Securities or REALS, for Franklin Savings Association, Ottawa, Kan. The product made its debut in January when Franklin made a $170 million REALS offering.

Because REALS pay a floating rate of interest fixed at a spread above changes in the Consumer Price Index, the instrument assures investors of a positive real rate of return.

The January issue was set at a 300 basis-point spread above the CPI, but the issue priced this month offered investors a 275 basis-point spread because of the annual put option that starts at the end of the third year. The bonds are putable at par.

"Basically, we're still experimenting with it," Mr. Rogalski said.

"We're trying to find out what kinds of things are attractive to investors and the best way to do that is by tinkering with the structure a bit."

The put option is attractive to investors because it puts a floor on the price of the bond after three years, he said.

The issue offered this month matures in 15 years, carries an initial coupon of 6.75% and was priced at par. The interest rate is reset quarterly based on the sum of 2.75% plus the change in the CPI.

The issue is backed by enough collateral to get an AAA rating from Moody's Investors Service and Standard & Poor's Corp.

Investors find inflation-linked bonds attractive because the real rate of return exceeds the performance of non-inflation linked instruments, Mr. Rogalski said.

Morgan Stanley research for the period between 1926 and 1986 shows long-term corporate bonds produced an average real return of 2.2% while long-term government bonds produced an average real return of 1.6%.

The Shearson Lehman Government/Corporate Bond index produced an average annual real return of 1.91% between January 1973 and September 1987, according to the report.

Pension fund managers have been major buyers of REALS both because of the guaranteed real rate of return and because the product hedges liabilities that are positively correlated with average hourly wage compensation, Mr. Rogalski said. "In an asset-liability sense, this is the only game in town to hedge these liabilities."

Property and casualty insurance companies have shown an interest in REALS because the product hedges inflation-driven increases in liability costs.

REALS benefit issuers with businesses whose earnings are correlated with the inflation rate, Mr. Rogalski said. For such an issuer, the higher coupon to be paid on the REALS would be offset by the stronger earnings associated with inflation.

# Underwriting

*Continued from page 31*

market share of 12%.

Merrill Lynch's first-place finish marks the first time the firm has held that honor in at least two decades, according to Securities Data Co., New York.

Merrill Lynch moved up sharply in IDD's common stock category, taking third place in the first quarter after finishing eighth in the last quarter of 1987.

The firm moved from No. 3 in the fourth quarter of 1987 to No. 1 in the underwriting of all debt issues. In this category, Merrill held a 16.8% market share compared with Salomon's 16% share.

But the gap in market share is wider if mortgage-related securities are removed from the debt category, a procedure that produces a more accurate measure of corporate finance activity. Measured in this way, Merrill has a 19.4% market share compared with the 12.7% share held by Salomon, a powerhouse in the mortgage-related underwriting business.

Merrill Lynch has been working to boost its debt underwriting volume for the last three or four years, said Edson V. Mitchell, managing director and head of the debt financing division at the firm. The effort involves closer coordination among the firm's investment bankers, traders and sales people, Mr. Mitchell said.

"Our objective is the long-term profitable penetration of the corporate debt market," he said.

Merrill Lynch's intensified effort resulted in several new clients, Mr. Mitchell said, noting the firm made its debut in the first quarter as a lead manager for Westinghouse Electric Corp., Pittsburgh, and Signal Capital Corp., Hampton, N.H.

Other highlights of first-quarter underwriting activity include:

- First Boston Corp. maintained its top-ranked position in the asset-related sector, with a market share of 40%. Salomon Brothers, however, narrowed First Boston's lead, taking a market share of 34%. In the fourth quarter, First Boston garnered 59% compared with Salomon's 13%.
- Drexel Burnham Lambert Inc. boosted its share of the high-yield debt market to 42% from 34% in the previous quarter. But Drexel held a 50% market share in the first quarter of 1987.
- Wheat, First Securities Inc., Richmond, Va., captured first place in the common stock category because of its $2 billion underwriting of an issue for Massachusetts Financial Services Co., Boston. Wheat, First ranked second in common stock in the last quarter of 1987.
- Salomon recaptured its position as the top-ranked underwriter of mortgage-related debt in the first quarter after sinking to fourth in the last quarter of 1987. Goldman, Sachs, which held the top-ranked slot in the fourth quarter of 1987, fell one notch in the first quarter of this year. ■

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# EBRI

*Continued from page 2*

surprised by the findings.

"Among our clients, very few took precipitous action as a result of the crash," said Ernest Bianco, director of U.S. consulting and senior vice president, Frank Russell Co., Tacoma, Wash.

Among the company's 40 large clients, one left the stock market completely, another reduced its allocation from 55% to 30%, one took out $300 million just before the crash and two funds bought stock, Mr. Bianco noted. "But our other 30-odd clients did nothing," he said.

Peter Morris, investment director for the Washington-based National Rural Electric Cooperative Association pension fund, also didn't view EBRI's findings as remarkable. "But I don't know that we'll ever really find out (exactly how much left the stock market), because those who sold probably won't tell anyone."

EBRI also found that private trusteed pension funds lost 10.4% of their value during the final quarter of 1987 — the largest quarterly loss in five years.

Net losses were $135 billion — $152 billion in realized and unrealized losses stemming primarily from stock price declines offset by $17.5 billion in dividend payment and interest income.

Of the $152 billion in total losses for the quarter, a $112 billion drop in the value of the equities and a $44.5 billion drop in other types of investments were offset with capital gains of $4.4 billion in fixed income.

EBRI's research found a net gain for the year, since the fourth-quarter losses were offset by three strong prior quarters. For the year, there were total earnings of 6.6%, or $71 billion — $5 billion from capital gains and $66 billion from dividends and interest income. The study also found that despite the fourth-quarter declines, direct stock holdings showed a positive return of 8.7% for the year.

EBRI also found equity assets directly held by pension funds were $405.2 billion as of Dec. 31, about the same as when they began the year, and had grown to $442 billion by April 11.

When funds report their investment results for 1987, Mr. Salisbury said, "it will be as if Oct. 19 never happened."

"It will look as if it was a good year — not a great year but not a bad year — and the blip will not even show."

Total pension assets at the end of the year were $1.118 trillion, still $38 billion ahead of the 1986 year-end level of $1.08 trillion but down from the record high reached at the end of the third quarter of $2.298 trillion.

The decline in stock values shifted the asset mix of private trusteed pension funds, with stock holdings falling to 36% from 40% of the total. Bonds increased to 17% from 14%. The rest of the change was accounted for by a dip in cash to 9% and a slight increase in other assets to 37%.

# PBGC says law could hurt

By Nicky Robertshaw

WASHINGTON — In its efforts to toughen minimum funding rules for ailing pension plans last year, Congress might have achieved the opposite effect, officials at the Pension Benefit Guaranty Corp. warn.

Healthy plans, however, might find themselves with a different problem: being assessed an excise tax for exceeding newly tightened maximum funding standards.

The problem in both instances relates to the mandated interest rates used in calculating a plan's liabilities. The minimum funding standard in the Pension Protection Act is 100% of current liability; under the full-funding limit in the Omnibus Budget Reconciliation Act of 1987, an employer loses tax deductions on contributions once plan assets exceed 150% of current liability.

Government officials haven't defined what is included in current liability. While most observers agree it would cover the accumulated benefit obligation, the government also might include such items as early retirement and death and disability benefits.

PBGC officials are concerned the congressionally mandated rate could interfere with the Pension Protection Act's intention of boosting underfunded plans.

"What it does is it reduces the valuation of the liability . . . in essence it weakens the funding standards," said PBGC Executive Director Kathleen P. Utgoff. "I don't think people realized just how many plans would be affected by this change in the law."

Generally, whenever the interest rate used to value the funding level goes up one percentage point, the liability goes down 10 percentage points.

Plans near the full-funding limit have a more immediate concern because they might already be on the hook for excise taxes if their quarterly contributions put them over the limit, according to Dave Guftafson, special assistant to the executive director and manager of the actuarial policy division at the PBGC.

Under the 1987 budget law, the interest rate plans must use to calculate current liability is between 90% and 110% of a four-year average of the interest rate of a 30-year Treasury note. The law, however, gives the Treasury Department authority to adjust the range to between 80% and 90% of the four-year average, and to weigh the four-year average toward the most recent interest rate.

Before the law was enacted, a plan could choose any interest rate that was "reasonable in the aggregate."

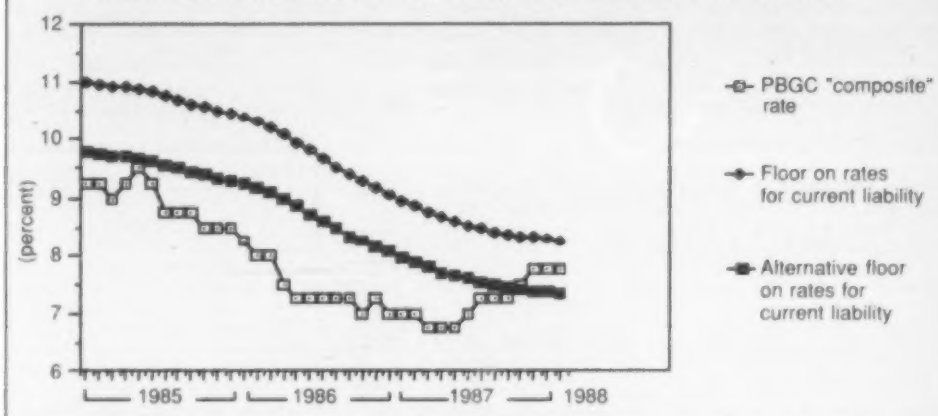
Under the mandated interest rate, "plans are faced not only with this corridor rate that is significantly higher than what they've been using, but it's also volatile," Mr. Guftafson said.

In practice, the new rate appears higher than those used in the past. For example, the average interest rate used to determine funding limits in 1987 was 7.8% for plans with 1,000 or more participants, according to a Wyatt Co. survey of actuarial assumptions and funding, compared with the Internal Revenue Service's rate, calculated as of Jan. 1 under the new law, of 9.12% and a range of 8.25% to 10.05%.

The IRS' first priority will be to issue a notice on how to calculate this interest rate, said James E. Holland, branch chief-pension actuarial branch of the employee plans and exempt organizations area of the IRS, in a speech earlier this year. The agency also is giving priority to defining just what current liability includes.

The problem of the interest rate stems in part from the full-funding provisions being done separately from the Pension Protection Act as a way to address deficit concerns rather than to reform pension funding, Mr. Guftafson said. ■

**Interest rates used to calculate current liabilities***




*These rates are intended to represent what might have been in effect if the Omnibus Budget Reconciliation Act of 1987 had been in place for past years. Pending further guidance from the IRS and PBGC, this should be considered a tentative guide

Source: Pension Benefit Guaranty Corp., Washington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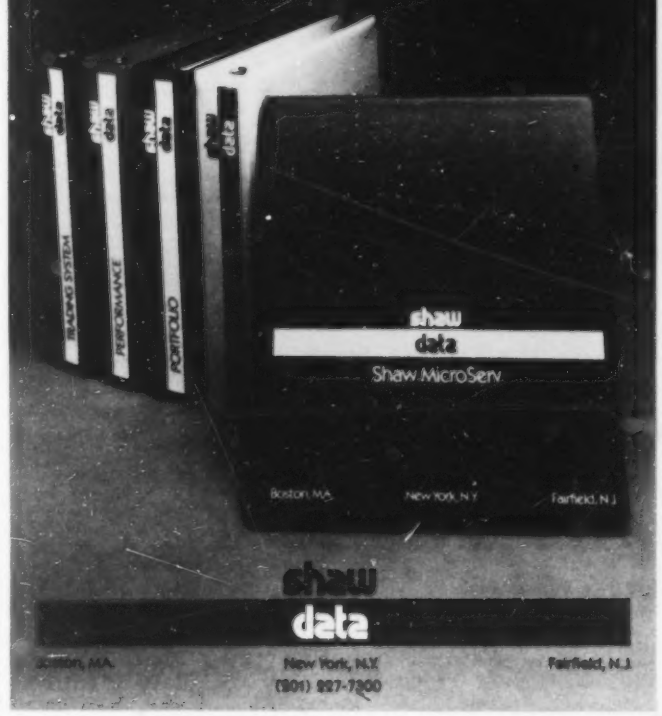


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# Costs climb

*Continued from page 1*
period of Oct. 15 to Oct. 21, 31 plan sponsors in its data base assigned 60.7% of their trades to so-called capital brokers (those willing to commit their capital to facilitate trades), 30.9% to research-oriented brokers and 8.4% to brokers that handle soft-dollar payments. During Oct. 15 to Oct. 21, SEI found slight shifts in trades — one percentage point — to capital and research-oriented brokers from soft-dollar brokers.

Data for other periods weren't available.

The study concluded institutions rely less on soft-dollar brokers during demanding periods.

"Execution costs by our measure did go up in the two months after the crash on the order of 1 penny to 1.5 pennies," said Gilbert Beebower, executive vice president, SEI.

According to another SEI study, the median commission paid by 35 pension sponsors for listed stocks fell slightly in the fourth quarter to about 6.2 cents a share from 6.9 cents for the entire year.

And an SEI study of 31 large money managers found commissions averaged 6.3 cents in the last half of 1987. But in November and December alone, the average dropped to 6.1 cents.

"Market impact is much more important than commission cost," noted Theodore R. Aronson, partner at Aronson & Fogler, Philadelphia, which runs $150 million.

At Disciplined Investment Advisors Inc., Evanston, Ill., which manages $500 million, Daniel J. Schweihs, principal, said, "We're having more brokers interested in doing business at 2 to 4 cents a share than were interested before the crash."

He said execution costs are unchanged even in today's less liquid market. He said smaller managers are less affected by the lower liquidity because they can be more nimble than larger managers.

As a result, he expects smaller managers to have better performance than larger ones during the first half.

Goldman, Sachs' Mr. Earle explained principal trading costs are higher because "volatility in the market is less certain. It's very unpredictable; the potential for risk is higher."

But he said Goldman agency transaction rates "have remained the same. I don't think we were at the low end to begin with. We were in the middle or high end."

First Boston's Mr. Mendez added, "A customer has to be more willing to pay more in commissions to get a trade done."

He said he hasn't noticed customers fleeing because trades requiring capital cost more.

Richard M. Crooks Jr., Allen's managing director, said, "There is a reluctance of dealers to commit capital because they all got burnt so badly in October and are shy about committing capital now. You have to pay a higher price to buy or take a lower price to sell." Allen does mainly principal trades, he said.

Aronson & Fogler's Mr. Aronson said the firm saw a rough doubling of bid/ask spreads after the crash. The spread had been a quarter of a point and it went almost as high as a half. Spreads have subsequently narrowed, he added, although they still are above precrash levels.

He said his firm has increased its use of the off-market crossing networks to 20% from less than 5% a year ago. ■

## Block trading

| | January | | February | | March | |
|---|---|---|---|---|---|---|
| | 1988 | 1987 | 1988 | 1987 | 1988 | 1987 |
| Total block trades | 62,816 | 80,483 | 67,301 | 67,512 | 81,037 | 78,341 |
| Total shares traded in blocks ($ billions) | 1.82 | 2.05 | 2.07 | 1.74 | 2.13 | 3.56 |
| Percentage of total NYSE volume | 52.1 | 50.8 | 56 | 50 | 52.8 | 52.9 |

Source: New York Stock Exchange

# Funding limit

*Continued from page 1*
are not going unnoticed, government officials and plan sponsors are equally concerned about what a solution for these companies might do to other, older plans.

The Internal Revenue Service has said it might increase the limit for companies hardest hit, but this could aggravate problems for more mature pension plans, whose full-funding limit would then be lowered to compensate for any tax dollars lost from the younger plans.

Adjusting the full-funding limits also could interfere with the intentions of the Pension Protection Act's minimum funding standards, enacted to help increase the funding of older, underfunded plans. In effect, pension sponsors now must try to manage their plans within a relatively narrow corridor.

"I think it needs careful study," said Kathleen P. Utgoff, PBGC executive director, who stressed the PBGC did not support the 150% full-funding measure. "It's not clear that there is a real problem, but we are definitely worried about it."

While altering the full-funding limit might help plans with young work forces, any adjustment would have to be balanced with a lower full-funding limit for the mature, problem plans, she said. "So cutting (the mature plans) close to the edge — if it really does cut them close to the edge — could cause us a problem."

The ERISA Industry Committee is polling its members about the effect of the measure and has been asked to share those results with the Treasury Department.

While companies can't go above 150% of current liability without penalty, they must be funded at 100% of current liability to meet the minimum funding standards under the Pension Protection Act. This means from year to year, the funding level must remain within this relatively narrow corridor, something plan sponsors and their advisers fear will be difficult given the volatility both of the interest rate used to value the assets and potential further volatility of the market.

Complicating the picture is a phenomenon that was not anticipated when the Budget Reconciliation Act was being finalized: The interest rates to be used to figure the current liability are higher than what companies have been using in the past few years, and unless modified, could dramatically affect the value of a plan's liabilities (*See story on page 51*).

The full-funding limitation was included in the budget bill as a way to generate $2.4 billion toward helping to trim the deficit, and both the Treasury Department and the tax committees in the House and Senate are seen as unlikely to change this.

"Digital has a real problem, but I don't think other companies are going to be willing to take a hit on their funding ability" to help ease the company's woes, said Mark J. Ugoretz, ERISA Industry Committee executive director. Calling the enactment of the full-funding limit for revenue-raising purposes "an obnoxious reason to manipulate the pension system," Mr. Ugoretz said: "The answer is not the adjustment of the 150% limit but rather its elimination, so we can go back to having some assurances that when retirees retire, the money will be there."

Also critical of the full-funding limit was Christopher Bone, consulting actuary of Actuarial Services Associates, Piscataway, N.J., a division of American Telephone & Telegraph Co.: "The main problem is that you've got a conflict between pension policy and tax policy. From our viewpoint, the full-funding limit was bad pension policy. It's tied to an interest rate that's too volatile, and it does not follow the assets as they go up and down."

The Treasury Department has a deadline of Aug. 15 to complete a study of the effect of the full-funding limit as well as to issue regulations. Those would include specifying how actuaries would figure the interest rate for current liability and defining what current liability encompasses. ■

# ERISA exemptions proposed

**By Brad Rudin**

The Department of Labor might soon lift some restrictions on pension plan investments in several kinds of asset-backed securities.

The proposed exemptions to the Employee Retirement Income Security Act, which could be formally proposed as early as next month, would free some entities involved in the administration of pass-through trusts from what the department regards as restrictions governing the relationship between a corporate pension plan and various parties-in-interest.

The proposal, however, does not incorporate several changes requested by First Boston Corp. and Salomon Brothers Inc., Wall Street's biggest underwriters of asset-backed securities.

For example, securities backed by lease receivables and to unsecured instruments wouldn't be exempt.

In addition, while the proposed exemption applies to the entities that service and operate pass-through trusts, it does not apply to providers of credit support. The Labor Department's concern here is that a conflict of interest might exist if the servicer of the trust is affiliated with the provider of credit support. (An asset pass-through trust is the entity through which pass-through asset-backed securities are sold.)

Diana H. Strickler, a vice president in the asset finance unit at First Boston, said the firm's counsel plans to respond in writing to the Labor Department proposal. Salomon officials did not respond to a request for comment.

Individual exemptions for securities backed by secured consumer receivables, secured commercial receivables, automobile receivables and single-family, multifamily and commercial mortgages soon could be published in the Federal Register. The exemptions also would cover guaranteed governmental mortgage pool certificates.

The Labor Department outlined its proposals in file memorandums regarding separate telephone conversations in late March with the legal representatives of First Boston and Salomon.

Among the specific concerns First Boston and Salomon executives cited in their applications were:

- ERISA violations could result if the sponsor or trustee of an asset pass-through trust has a pre-existing party-in-interest relationship with a pension plan.
- If the sponsor or trustee were considered a fiduciary of the pension plan, sale of the certificates could be barred by ERISA provisions that prohibit a fiduciary from dealing with plan assets in its own interest.
- Prohibited transactions could also occur if the underlying assets of a trust were considered "plan assets" of the pension plan. ■

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Investment Age

Best managed companies

Merck & Co. is No. 1 in the minds of money managers.

# Managers rate Merck best in U.S.

Merck & Co., General Electric Co., Wal-Mart Stores Inc., McDonald's Corp. and Digital Equipment Corp. are the best-managed U.S. companies, a *Pensions & Investment Age* survey of institutional money managers concludes.

Other companies garnering less, but still significant, recognition are The Dow Chemical Co., Borden Inc., Ford Motor Co., IBM Corp., H.J. Heinz Co., Philip Morris Cos. Inc., Sara Lee Corp., Minnesota Mining and Manufacturing Co., Hewlett-Packard Co., Gannett Co., Sun Microsystems Inc., Abbott Laboratories and Cray Research.

**Merck**, which took top honors in the *P&I Age* straw poll, also has been acclaimed as a superior company in surveys sponsored by other business publications.

"We're impressed by their research effort and the successful new products they've developed, which provide good earnings visibility," said Hilton Hemphill, president of MSecurities Corp., Dallas, the

*Continued on page 48*

# Buybacks hoist stocks' returns

By Brad Rudin

NEW YORK — Companies that repurchased their stock following buyback announcements delivered returns that handily beat the market, data produced for *Pensions & Investment Age* by Salomon Brothers Inc. show.

But companies that made announcements without buying back the stock posted returns that varied little from the market.

The impact of buyback announcements on stock prices is noteworthy because many companies used this approach in an effort to prop up the price of their shares after last year's stock market plunge.

Among the findings:

- A universe of 100 companies with known progress in completing a buyback program produced an equal-weighted return of 19.03% and a price-weighted return of 23.79%.
- A universe of 100 companies that made no known progress on announced buybacks produced a 15.94% equal-weighted return and a 14.08% price-weighted return between Oct. 19 and April 14. The Standard & Poor's 500 stock index, which is market weighted, delivered a 15.53% return in that same period.
- The companies with the 100 largest buyback announcements in terms of dollars since Oct. 19 — regardless of whether they followed with actual buybacks — produced an equal-weighted return of 14.66% and a price-weighted return of 17.71% through April 14.

Stock buybacks hold the promise of better earnings per share and of higher prices, so investors typically are encouraged.

"If we owned it and they announced a buyback, we'd be more likely to hold on to it than we would before," said Stephen B. Timbers, chief investment officer at Kemper Financial Services Inc., Chicago.

Only about 10% of the stock buyback announcements made in 1987 and the first quarter of 1988 were followed by actual purchases, the data showed. (Because some announcements were made recently, the data could overstate the extent to which companies are ignoring their stock repurchase announcements.)

The Salomon data, and a separate study by Georgeson & Co. Inc., New York, suggest announcements alone did not make these companies perform better than the market.

"Subsequent announcements — as the message strikes home that somebody is speaking with a forked tongue — are going to have a diminishing impact," said Eric T. Miller, chief investment officer at Donaldson, Lufkin & Jenrette Securities Corp., New York.

"You have to put your money where your mouth is to get your bang for the buck," said Jamison G. Graf, vice president and equity manager at One Federal Asset Management Inc., Boston.

The strong showing for companies that actually bought back stock encouraged some money managers.

"I've been a big supporter of buybacks, so I'm pleased as punch that the results support the position that buybacks are favorable," said

*Continued on page 55*

**Announced buyback effect on stock price**
**10 best performers**
**(Oct. 19 - April14)**

| Company | price change % |
|---|---|
| Firestone Tire | 185.59 |
| Sabine | 114.77 |
| Oregon Metallurgical | 72.97 |
| Cleveland Cliffs | 63.27 |
| Hillenbrand Industries | 57.8 |
| Quantum Chemical | 51.65 |
| Alberto Culver | 48.72 |
| Schering Plough | 45.99 |
| GAF | 45.71 |
| FHP International | 42.37 |

Source: Salomon Brothers Inc.

# Walton starts financial firm

By Fred Williams

BENTONVILLE, Ark. — Sam Walton, who became one of the nation's richest men through his chain of Wal-Mart discount department stores, is turning his company's resources to financial services, *Pensions & Investment Age* has learned.

Walton Enterprises Inc. will start a yet-unnamed subsidiary that will focus on public and corporate finance, fixed-income trading and sales and management of separate fixed-income portfolios for banks and employee benefit funds, according to Shack Cashen, chief investment officer of the new firm.

Alice Walton, Mr. Walton's daughter, will be president.

Mr. Cashen said the impetus came from Ms. Walton. Her father "is aware of all this, he knows all the plans and has approved the plans," but won't be directly involved in managing or overseeing the new firm.

Ms. Walton is vice chairman, primary investment officer and a board member of Northwest Arkansas Bankshares, a group of banks owned by Walton Enterprises.

Mr. Cashen joined Walton Enterprises — parent company of Wal-Mart Stores Inc. — seven months ago as chief investment officer of First National Bank Bentonville, whose parent company is Northwest Arkansas Bankshares. He previously worked with Texas billionaire H. Ross Perot.

The move caught financial analysts and investment specialists by surprise; only one analyst contacted had heard of the plan, and then only in general terms.

"This is the first I have heard of it; it may be something he's (Sam Walton) doing on the side . . . It is a different ball game for them all together," said Wayne Hood, retail analyst at Prudential-

*Continued on page 54*

INSIDE

**Overseas numbers game — P. 17**

## LATE NEWS

### Competition for Citicorp narrows

NEW YORK — The bidding contest for Citicorp's money management unit has narrowed to USF&G Corp., Baltimore, and Kemper Financial Services Inc., Chicago, sources said.

The price of the unit, however, has declined to the mid-$90 million range from earlier reports of non-binding bids of $100 million to $110 million, the sources said. The drop reflects that the current bids are binding, market factors and closer looks at the unit's business, they said.

Citicorp officials declined to comment on the sale.

A USF&G spokeswoman confirmed the insurance company is still in the running for Citicorp Investment Management Inc., which manages more than $20 billion in domestic discretionary assets. Kemper officials declined to comment.

### Director leaving Boise Cascade

BOISE, Idaho — David R. Norris, director of retirement funds overseeing about $925 million in employee benefit assets at Boise Cascade Corp., is resigning to join SEI Corp.

Mr. Norris, who will hold the newly created position of vice president-plan fiduciary, will join SEI's Chicago office effective May 31. He could not be reached for comment.

### Munder becomes independent

BIRMINGHAM, Mich. — The principals of Munder Capital Management Inc. have bought out Security Pacific Investment Group Inc.'s interest in their firm for an undisclosed amount.

Security Pacific, Los Angeles, held a minority share of Munder Capital Management, said Lee P. Munder, president, with the majority held by himself and three associates. Neither Mr. Munder nor a Security Pacific spokeswoman would state the exact amount held by each party.

Mr. Munder and Security Pacific started Munder Capital Management in mid-1985. The firm has grown to nearly $1 billion in assets under management. About 80% is tax-exempt, Mr. Munder said.

He said the principals bought out Security Pacific because they wanted full ownership and control of the firm. Security Pacific realized a significant return on its investment, he added. Neither he nor Security Pacific would state the purchase price or Security Pacific's gain.

### Fund launched by TIAA-CREF

NEW YORK — The Teachers Insurance and Annuity Association — College Retirement Equities Fund has approved a group annuity product that would allow participants — for the first time — to move accumulated retirement assets from the fixed-income portion into other investment options, including those outside the TIAA-CREF universe if approved by the sponsoring college or university.

The product, which will be tied in with the previously announced money-market annuity option, is required by the Securities and Exchange Commission as a condition to its granting TIAA-CREF certain exemptions in connection with registering CREF as an investment company under federal law.

Under the proposal, which must be approved by the appropriate regulatory agencies, participants could move 10% of their assets into CREF each year for 10 years, said Peter C. Clapman, senior vice president and association general counsel for the TIAA-CREF.

Once in CREF, assets could be transferred among the equity fund, money-market fund, the group annuity fund - all under the CREF umbrella — or back into the fixed-income fund.

### FASB delays draft for 2nd time

STAMFORD, Conn. — The Financial Accounting Standards Board has pushed back the release date for its exposure draft on accounting for post-retirement health benefits until the third quarter of 1988. The draft's release, originally scheduled for the first quarter, previously was postponed until the second quarter.

The FASB expects to issue its final statement on accounting for post retirement medical benefits in 1989, as scheduled, according to Michael Merlob, consultant with William M. Mercer-Meidinger-Hansen Inc., Stamford.

Mr. Merlob said recent personnel changes on the FASB as well as a re-evaluation of cost and funding methods for post retirement benefits lead to the delay.

### Philadelphia pension post filled

PHILADELPHIA — John Fuller, deputy director of finance for the city of Philadelphia, has been appointed to the additional post of pension manager for the city's $1.5 billion municipal retirement system. He had been acting pension manager since August.

## DEPARTMENTS


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Vol. 16, No. 9 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1988.

# Post-crash tactics

## Funds flood allocation managers with calls

By Carol Wiley

Five tactical asset allocation managers have added a total of 35 pension fund clients and handled hundreds of inquiries about the strategy in the six months since Oct. 19.

Pension fund executives are showing increasing interest in active asset allocation strategies as they seek ways to reduce market volatility and cope with the effects of FASB 87.

Those who have signed onto the programs in the past six months also report added value and reduced manager fees with tactical asset allocation.

In addition, the managers said, both sides of the industry now acknowledge what asset allocators have been claiming for some time: 80% to 95% of investment performance is achieved through asset allocation; the remainder, through security selection.

Tactical asset allocation comprises several investment strategies, making short-term switches among asset classes in an attempt to add value in varying market conditions. The shifts are achieved through the use of futures or index funds. Risk measurement is quantitative and disciplined.

Tactical asset allocation "will be the most dominant (investment) style in tax-exempt business in the next three years, no doubt about it," said Bruce Poliquin, vice president and principal of Avatar Associates, New York.

The firm has signed on more than 12 clients in the past six months, including Springs Industries Inc., Fort Mill, S.C.; Levi Strauss & Co., San Francisco; Kroger Co., Cincinnati; Occidental Petroleum Corp., Los Angeles; and National Starch & Chemical Corp., Bridgewater, N.J.

To say business has picked up since the crash "is an understatement," Mr. Poliquin said.

TSA Capital Management, Los Angeles, which manages $3 billion in its tactical asset allocation program, has added six clients since Oct. 19, an average number, according to Roger Clarke, managing director and chief investment officer.

Potential clients, however, make up "a fairly long list," he added. "There's a lot of interest, but people are still very cautious. They're still licking their wounds from Oct. 19."

Bankers Trust Co. — Investment Management Group, New York, has formalized its tactical asset allocation strategy and has one pension client that has invested $50 million. In the two days following the announcement of the product, Vice President Steven A. Lauer said he received six phone calls, compared with "maybe three or four inquiries" all of last year.

He will be making nine presentations on the product in the next two to three weeks.

At a recent conference sponsored by The Northern Trust Co., Chicago, for its master trust clients, there was standing-room only in the session on tactical asset allocation. Northern Trust offers a tactical asset allocation product, designed by Ibbotson Associates, Chicago. Interest in Northern Trust's offering has "quadrupled," and the trust company is negotiating with two potential clients, according to Marvin Waring and Laurence B. Siegel, managing directors of Ibbotson Associates.

Matrix Capital Management, Greenwich, Conn., reports four new clients since the crash — including J.C. Penney Co., New York — bringing total tax-exempt assets in its program to $170 million.

"There has been a tremendous increase in interest" since Oct. 19, said Lynn Edelman, Matrix vice

*Continued on page 53*

## 3 resolutions on 'pills' lose; sponsors see stronger vote

By Marcia Parker

Corporations defeated the first of this year's crop of anti-poison pill resolutions sponsored by institutional investors, but the resolutions seem to have generated stronger support than last year.

The resolutions generally asked corporations to seek shareholder approval for poison pills.

The strong showing has given institutional investors a boost at the start of the proxy season. Corporate governance experts agree shareholder support for these early anti-poison pill proposals is significant, although they warn it is too early to draw any conclusions about the rest of the season.

Stockholders at United Technologies Corp., Allied-Signal Inc. and Consolidated Freightways Inc. voted down the first of more than 20 anti-poison pill resolutions on tap for various companies. The State of Wisconsin Investment Board sponsored the resolutions at United Technologies, which was 54% owned by institutions as of March 31, and Allied-Signal, which was 50% owned by institutions as of March 31.

The California Public Employees' Retirement System sponsored the resolution at Consolidated Freightways, 76% institutionally owned March 31.

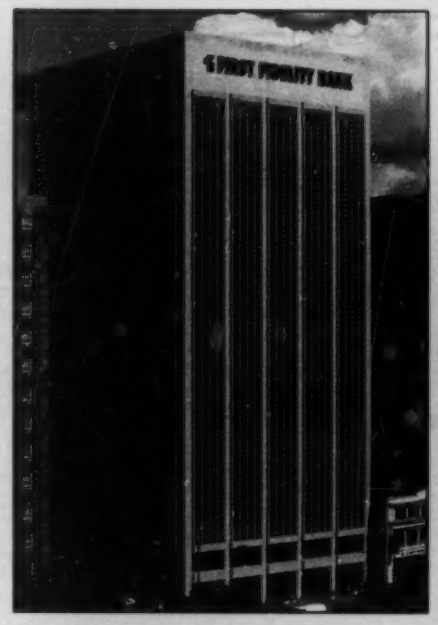
So far, the votes in favor of the anti-poison pill resolution ranged from a low of 32% to a high of 45%, not counting abstentions. Counting abstentions, the vote ranged from 28.8% to 42.4%. Last year, the early votes supporting anti-poison pill resolutions were lower.

"Obviously the votes are holding up and are comparable or better than the early votes on poison pills during last year's proxy season," said Peg O'Hara, who tracks corporate governance issues at the Investor Responsibility Research Center, Washington.

"These are three very strong votes. It shows strong support, although it is too early to tell across the board how all of these resolutions will do during this year's season."

Meantime, the Securities and Exchange Commission derailed efforts by International Paper Co., Dayton-Hudson Corp. and Upjohn Co. to keep anti-poison pill resolutions sponsored by institutional investors off their 1988 proxy statements.

*Continued on page 53*




**Institutional investors are sticking with regional bank stocks such as First Fidelity Bancorporation, Newark, N.J.**

## Institutions overweight bank stocks

By Curtis Vosti

Despite problems with Texas regional banks and nagging loan troubles in banks across the country, institutional investors remain bullish — if cautiously so — on bank investments.

While institutional weighting of bank stocks has dipped slightly, to 4.4% as of March 31 from 4.7% a year earlier, it still is heavier than the Standard & Poor's 500 stock index's 2.1% weighting as of March 31, ac-

*Continued on page 54*

FEATURE

# Weighing the options

## Market-weight indexes open to 1-country domination

By David A. Umstead

The growing dominance of Japanese equities in a typical international stock index fund presents investors with a dilemma of concentrating more than half of their portfolio in one country.

This situation, the result of constructing portfolios based on market-value weight, leads one to look for other designs that would preserve the benefits of such weighting within each national market, while also providing a more diversified distribution of capital across countries.

It is important to understand the reason the market-value weighting is used for indexation. This approach is attractive to index fund managers and shouldn't be abandoned casually. Under it, each security in the portfolio is weighed in proportion to the market value of its total shares outstanding.

Of course, passive investors typically deviate from market weightings in the asset allocation decision. Passive investors, who index all their equities and all their bonds, think nothing of using a mix of the two that is not market weighted. Similarly, investors who index all their domestic equities think nothing of setting their allocation to international equity indexes at a far lower weight than a market weight would dictate.

Even a purely passive investor may want to select a mixture of individual country index funds weighted in some fashion other than market-value weights. The bulk of trading volume in each of the equity markets of the world is still primarily domestic. This suggests the international equity markets are not yet one market. Price movements in each market are still predominantly the result of local events.

Certainly, the market valuation mechanism is far different in West Germany than it is in Japan. For instance, the average price-earnings ratio, using earnings for the 12 months ended March 31, is much lower in Germany, 11.7%, than in Japan, 61.3%.

These idiosyncrasies, which are the very cause of the diversification benefits being sought, are also a reason maintenance of market weightings across countries might not guarantee performing above the average of all international investors.

In place of market-value weight, investors might consider weighting by gross domestic product as a logical alternative. The GDP is an objective measure of the size of each economy; it is not subject to local differences in valuation; and it is more stable over time than market value weights. As a result, it offers a more diversified and uniform distribution of capital around the world.

Table 1 provides a current comparison of GDP- and market capitalization-based allocations for portfolios encompassing the major equity markets of Europe and the Pacific Basin.

The market value-weighted Morgan Stanley Capital International EAFE index shows the weighting favors the two countries with the most highly developed financial markets. Japan and the United Kingdom are given greater weight than the size of their economies would warrant.

On the other hand, a market such as Germany with its enormous economy is underrepresented partly because most of it equity capital has been raised privately.

Smaller, emerging markets such as Spain and Italy are underrepresented partly because of a combination of government ownership and a general lack of sophisticated equity markets.

During the past 18 years, for which data on the EAFE index is readily available, a GDP-weighted version of the index is more uniformly distributed by country and considerably more stable than the market value-weighted index. The market value-weighted portfolio has become more concentrated over time.

Japan began 1970 at 14% of the capitalization-weighted portfolio. By the beginning of 1987, its weight had climbed to more than 50%, and it now exceeds 60%. In the GDP-weighted portfolio, Japan began 1970 at 21%; it currently accounts for just more than 30%.

Another type of international index, one composed of the 50 largest capitalization-weighted non-North American stocks, again illustrates the extreme Japanese concentration from a market value-weighted approach. Of the top 50, only 10 are not Japanese: six stocks in the United Kingdom; two in West Germany; and one each in Italy and the Netherlands.

Contrast this with the top 50

*Continued on page 14*

David A. Umstead is managing director at Boston International Advisors Inc., Boston.

TABLE 1

**Weighting comparison**

**(As of Dec. 31, 1987)**

| | Cap index | GDP index | Variance from Cap |
|---|---|---|---|
| Austria | 0.2% | 1.5% | 1.3% |
| Belgium | 0.9 | 2 | 1.1 |
| Denmark | 0.3 | 1.4 | 1.1 |
| France | 3.6 | 11.8 | 8.2 |
| Germany | 4.7 | 15.8 | 11.1 |
| Italy | 2.6 | 9.1 | 6.5 |
| Netherlands | 2.2 | 3 | 0.8 |
| Norway | 0.2 | 1.1 | 0.9 |
| Spain | 1.5 | 3.7 | 2.2 |
| Sweden | 1.2 | 2.2 | 1 |
| Switzerland | 2.8 | 2.3 | −0.5 |
| United Kingdom | 14.4 | 8.7 | −5.7 |
| **Europe** | **34.6** | **62.6** | **28** |
| Australia | 2.1 | 2.7 | 0.6 |
| Hong Kong | 1.2 | 0.6 | −0.6 |
| Japan | 61.4 | 33.4 | −28 |
| Singapore | 0.7 | 0.7 | — |
| **Pacific Area** | **65.4** | **37.4** | **28** |

Source: Morgan Stanley Capital International

TABLE 2

**Performance comparison**

**(total return in U.S. dollar terms)**

| | Cap index | GDP index | Variance from Cap |
|---|---|---|---|
| 1987 | 25.4% | 12.4% | −13 % |
| 1986 | 69.6 | 70.9 | 1.3 |
| 1985 | 56.1 | 74.5 | 18.4 |
| 1984 | 7.5 | 6.7 | −0.8 |
| 1983 | 24.3 | 24.9 | 0.6 |
| 1982 | −1.2 | −1.2 | 0 |
| 1981 | −1.6 | −4.4 | −2.8 |
| 1980 | 23.2 | 18.3 | −4.9 |
| 1979 | 5.8 | 8.6 | 2.8 |
| 1978 | 32.7 | 37.3 | 4.6 |
| 1977 | 18.8 | 12.3 | −6.5 |
| 1976 | 3 | 0 | −3 |
| 1975 | 36.5 | 33.8 | −2.7 |
| 1974 | −22.4 | −15.1 | 7.3 |
| 1973 | −13.7 | −5.1 | 8.6 |
| 1972 | 39.3 | 44.4 | 5.1 |
| 1971 | 29.9 | 24.8 | −5.1 |
| 1970 | −10.6 | −11.3 | −0.7 |
| **Average** | **15.6** | **15.9** | **0.3** |

Source: Morgan Stanley Capital International returns, adjusted for GDP weights and withholding tax to U.S. investors.

# Study shows topping S&P difficult

NEWPORT BEACH, Calif. — Beating the Standard & Poor's 500 stock index return by at least 400 basis points is an attainable but difficult goal, according to an investment consultant.

In the 10-year period ended Dec. 31, only 11% of equity mutual funds sampled recorded a compound annual return of more than 400 basis points over the S&P 500, said Budge Collins, president of Collins Associates, in a study.

By contrast, 45% of mutual funds beat the S&P index alone in the same period.

Mr. Collins generated the comparisons using the mutual fund data base of CDA Investment Technologies Inc., Silver Spring, Md. For the 10-year period, the data represented 250 mutual funds, $140 billion in assets.

The study shows 1987 was the best year since 1983, with a greater share of mutual funds beating both the S&P itself and the S&P plus 400 goal.

On an annual basis, for years ended Dec. 31, the study found that in:

- 1987, 13% of mutual funds beat the S&P 500 by 400 basis points, while 25% of them beat the S&P 500 alone;
- 1986, 9% and 23%;
- 1985, 11% and 24%;
- 1984, 8% and 18%;
- 1983, 21% and 38%;
- 1982, 45% and 60%;
- 1981, 46% and 62%;
- 1980, 35% and 49%;
- 1979, 68% and 80%; and
- 1978, 49% and 74%.

"For the recent past it's been extremely hard for active managers to beat the S&P 500," said Loretta Morris, a Collins researcher.

For the three-year period ended Dec. 31, 1987, only 3% of the mutual funds beat the S&P 500 by 400 basis points, while 14% beat the S&P 500 alone.

For the five-year period ended Dec. 31, no mutual fund beat the S&P 500 by 400 basis points, while only 11% beat the benchmark index. ■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# Mutual fund growth to slow

## Healthy cash flow to spur industry consolidation

The mutual fund industry is likely to enter a period of slower growth, although the changing nature of the industry could mean it is more likely to thrive during adverse economic swings, according to a new study.

The study, "The Mutual Fund Industry: After the Crash," conducted by Sanford C. Bernstein & Co. Inc., New York, also predicts industry consolidation is likely because of "substantial excess cash flow" during the next five years, even assuming slower growth rates.

The study forecasts industry assets will grow between 9% and 11% annually in 1988 and 1989. Although down from the 24% growth rate in 1987, the expected rate is much higher than the 2% growth experienced between 1974 and 1978.

Long-term full cycle industry growth should average between 15% and 18%.

"We believe the industry has fundamentally changed in the past decade, becoming a much more broadly based household savings vehicle," Bernstein reports.

The industry's expected growth should be fueled by a spurt — to 75% of total investments from 30% — in short- to intermediate-term fixed-income funds, the study predicts.

In light of the October crash, market uncertainties should feed households' penchant for substantially shortening maturities, according to the report.

Money market and other short-term fixed-income funds have been growing at a rate three times the growth of bank and thrift consumer deposits in the past four years, Bernstein reports.

"In fact, since the equity market crash in October, short-term mutual funds have increased by $33 billion, or 11%, while bank and thrift consumer accounts and (certificates of deposit) have grown by only $18 billion, or 1%," the study says.

This expected change in investment strategies will "marginally" reduce average management fees, but will "dramatically" reduce the pool of available incentive loads to brokers and to support marketing spending.

The study also predicts industry profit margins will decline 20% to 25% over the next several years.

Other changes predicted in light of the October crash include:

- Some form of Glass-Steagall reform, including an allowance for bank underwriting and sale of mutual funds;
- interest rates will be "quite volatile" in 1988;
- individual company earnings performance will depend on product mix, reputation and mode of distribution. ■

## Index

*Continued from page 13*

holdings in an international index, GDP-weighted by country and capitalization-weighted within each market. This list has only 19 stocks in Japan. Eleven stocks are in Germany, six in France, five in Italy, three in Spain, two in the Netherlands, two in the United Kingdom, and one each in Australia and Austria. There can be no doubt which portfolio offers better diversification.

No one is interested in improved diversification if it can be achieved only at great cost. Japan through the years has had an extraordinarily growing equity market. Those investors who believe this success will continue are reluctant to cut their Japanese holdings. They might be surprised and comforted to know they could have reduced their Japanese exposure, using properly designed GDP-weighted strategy, and still outperformed a capitalization-weighted strategy in the past 18 years.

A GDP-weighted strategy requires more management than a market-weighted strategy. One of the most attractive aspects of a capitalization-weighted international index fund is that very little rebalancing is required. In fact, if stocks paid no dividends and there were no new issues, mergers or acquisitions, a "plain vanilla" international index fund would be "buy and hold" forever. There would be absolutely no trading costs beyond the initial investment.

A GDP-weighted strategy requires periodic rebalancing. Performance differentials between markets cause significant drift from the relatively static GDF weights. While the need for trading is a disadvantage because of transaction costs, it does build a systematic buy-low, sell-high feature into the strategy. Capital invested in countries that perform above average must be periodically reallocated into those countries that have underperformed.

Simulations for the past 18 years reveal long-term results are somewhat sensitive to the rebalancing technique.

Table 2 shows the year-by-year results of a GDP-weighted strategies compared to a capitalization-weighted strategy applied to the EAFE index. While it is obvious that in any given year, results in the two strategies can be quite different, the GDP-weighted strategy, net of estimated rebalancing costs, slightly outperformed the capitalization-weighted strategy by an average of 30 basis points a year.

A GDP-weighted international index fund is a logical next step in the evolution of international indexing. It is an attractive alternative for the investor who wants to maintain a passive approach to international investing, but is concerned with the increasing Japanese concentration of the standard approach.

A GDP-weighted strategy is more uniformly distributed around the world, offering improved diversification. It provides a systematic asset allocation scheme that historically has been an excellent performer, in spite of its relatively modest exposure to Japan. It is particularly timely for those worried that the Japanese market is overvalued.


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INTERNATIONAL

# Index fund returns not exact match

By Marlene Givant

In international investing, comparing the performance of passive stock managers is almost as interesting as comparing active returns.

The complexities and expense of international stock indexing have led managers to use various sampling methods, which in turn have led to wide differences in performance among funds tracking the Morgan Stanley Capital International Europe Australia Far East index.

For example, Wells Fargo Investment Advisors' EAFE pooled fund returned 27.3% last year, compared with the EAFE's 25.2% and Chase Investors Management Corp.'s EAFE index fund's 24.3%.

Officials at San Francisco-based Wells Fargo said the performance difference is attributable to the fund's including only nine EAFE countries; the return is closer to that of a nine-country benchmark. The firm since has added six markets to its index because it hired Morgan Stanley Trust Co., New York, as its global custodian, assuaging concerns about settlement and capital repatriation in some markets. EAFE covers 18 countries and about 975 stocks.

Chase's fund experiences tracking error because it includes only 520 EAFE stocks, according to Charles Massare, vice president of the New York firm.

What's wrong with passive managers outperforming the EAFE — especially when few active managers have?

"On the premise that tracking error is a negative, positive tracking error ought to be as concerning to you as negative tracking error," said Nicholas Lopardo, chief investment officer of State Street Bank and Trust Co., Boston.

Indeed, pension executives say they pay careful attention to tracking error in evaluating indexers in international searches.

When the $540 million CIBA-GEIGY Corp. pension fund started international indexing three years ago, "We had viewed indexing as a quick, cost-effective way of becoming involved in international," said William J. McHugh Jr., director of trust funds for the Ardsley, N.Y.-based company.

"We were cognizant of the fact you can have a tracking error. State Street had a good record of closely following the index. (It followed) nine of the 17 markets (in EAFE) at that time so it was especially amazing they could do so well," he said.

CIBA-GEIGY invests $15 million in State Street's commingled fund.

Tracking error results from ranges in the assets in an index fund, the degree of replication and the number of countries and stocks included. Even the exchange rates and times used to calculate returns cause short-term gaps.

The Public Employees Retirement System of Nevada invests $65 million with Axe Core Investors, Tarrytown, N.Y., in a fund that tracks the EAFE using American depository receipts, which are receipts for shares of a foreign corporation that are traded in the United States.

"One of the reasons for tracking error in our portfolio is because . . . there aren't ADRs for that whole (EAFE) index. It's a stratified sample to replicate the index. You would expect some tracking error," said Laura Wallace, investment officer of the $2.5 billion Nevada fund.

All the major indexers agree the longer the time horizon, the lower the tracking error.

State Street and American National Bank & Trust Co. of Chicago, the oldest international indexers, started within a few months of one another in 1979. For the nine years ended Dec. 31, State Street's fund returned a compound annualized 21.1% vs. the EAFE's 21.6%. American National, which did not report for the full year of 1979, returned an annualized 22.9% for the eight years ended Dec. 31, vs. the EAFE's 23.6%.

The index's returns were obtained from the Pensions & Investments' Performance Evaluation Report.

State Street overshadows its competitors in terms of international assets for U.S. tax-exempt clients. It runs $4 billion in passive international accounts — $2.5 billion in passive separate accounts and $1.5 billion in a commingled index fund. American National runs $220 million, all in an EAFE index commingled fund.

Wells Fargo manages $800 million in EAFE commingled funds and Chase Investors runs $370 million overseas, including a $50.4 million commingled fund.

Both firms have been international indexers for almost seven years.

While a sizable tracking error

*Continued on page 19*

**EAFE index fund returns**
**(periods ended Dec. 31)**

| | Quarter | 1 yr. | 3 yrs.** | 5 yrs.** |
|---|---|---|---|---|
| State Street Bank | −10.2 | 25.2 | 48.8* | 34.5* |
| Wells Fargo | −9.8 | 27.3 | 48.1 | 33.5 |
| Chase Investors | −10 | 24.3 | 50.6* | 35.9* |
| American National/Chicago | −10.2 | 24.8 | 49.6 | 33.4 |
| **EAFE** | **−10.5** | **24.9** | **49.3** | **34.9** |

Source: Pensions & Investments' Performance Evaluation Report
* Data supplied by firm
** Returns are compound annualized

# U.S. investors might export small-cap boom

By Joel Chernoff

International small-cap portfolios might emerge as a hot area in the next few years, as U.S. institutional investors delve deeper into international equities.

So far, there has been only a trickle into small-capitalization accounts, but some managers are unveiling products that promise additional diversification and higher returns with what some claim is actually lower risk.

"I think it will be a growing area, but it is still a real niche play," said Lawrence Davanzo, senior vice president at Wilshire Associates, Santa Monica, Calif.

"For funds large enough to consider diversification outside of the U.S. by types of equity investment, small-cap should be considered," said Carol Proffer, principal at William M. Mercer-Meidinger-Hansen Inc., Dallas.

The domestic rally in small-cap stocks also might boost pension executives' interest. The $2.7 billion Fire & Police Pension System — City of Los Angeles, which just hired six domestic small-cap managers to run $192 million, might consider hiring a small-cap manager in its upcoming search for international managers, said Allan Moore, assistant manager.

*Continued on page 19*

**Experts who believe small-cap international equities could be right for some pension funds — with limitations — include (clockwise from top left) Lawrence Davanzo, Wilshire Associates; Carol Proffer, Mercer-Meidinger-Hansen; Barry Gilman, PCM International; and David Booth, Dimensional Fund Advisors.**

FEATURE

# Privatization puzzle

## Speculation tax may cool funds' ardor

By Nick Ryan

Fears of stricter interpretations of tax laws might cause British pension funds to shun privatizations of government-owned companies — including a pending $40 billion selloff of the electricity industry.

The concerns stem from recent efforts by the Inland Revenue — the U.K. equivalent of the Internal Revenue Service — to tax "speculative" investments made by tax-exempt investors.

These include profits gained from subunderwriting — where institutions guarantee to take any unsubscribed shares in return for a slice of the underwriting premium.

Also affected is a wide array of investments, including some involving derivative instruments, program trading, short-term bond strategies, gold and commodities.

Fears of taxation could set back the British government's continuing efforts to privatize various industries.

The electricity industry privatization, involving both generators of power and distributors of energy and electrical appliances, is expected to occur late this year or early next year.

Pension fund managers, many of whom are nursing their losses from subunderwriting British Petroleum last fall, increasingly feel that if profits from such sales are taxed, the exercise might not be worthwhile.

In the United Kingdom, investment banks traditionally share the risk with subunderwriters. With British Petroleum, underwriters got stuck with virtually the entire $12.6 billion issue, at a penalty of 90 cents per share.

The National Association of Pension Funds is pursuing the taxation issue, which it sees as having serious implications for London as a center for raising capital and for the tax status of pension funds, which have been participating in underwritings for years.

"The result of the BP share issue should remind (Inland) Rev-

*Continued on page 19*

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# Privatization

*Continued from page 17*

enue that the subunderwriting activities of pension funds do not always lead to a profitable return and taxation may result in funds turning away from this useful and important activity," said John McLachlan, outgoing chairman of the NAPF Investment Committee.

"If (subunderwriting) is taxed, some funds may wonder whether it's worth the management time," added David Prosser, investment director of Legal & General Assurance Society Ltd., a major insurance company with $40 billion in assets under management.

The Inland Revenue has set up a special office to investigate alleged "trading" activities by pension funds.

These short-term, speculative activities are distinct from longer-term "investments," but the law does not clearly define the differences between the two.

Much of the office's early investigation has centered on subunderwriting activity, but the current focus has been on other investments that might be regarded as speculative.

The special office is believed to be investigating about 10 plans; at least one, reported to have been dealing extensively in gold bullion, has been assessed for tax.

Other areas believed to be under investigation are:

- "soft" commodities. For example, a plan sponsor whose business is in the food industry might be tempted to use its in-house expertise and take a position in, say, cocoa futures.
- "bond washing." This involves active trading, particularly in short government bonds, just before and after a coupon date. Under this scenario, a pension fund would sell a bond to a taxable investor after the ex-dividend date but before the dividend is paid. After the dividend is paid to the fund, it would repurchase the bond, enabling the fund to register a tax-exempt gain while the taxable investor would walk off with a deductible tax loss.
- futures and options, including such things as currency hedging. The tax authorities believe it is all right for a fund to hedge its currency risk against specific holdings in a country, but takes umbrage if the fund were to buy Japanese stocks but hedged them in deutsche marks. That practice, they believe, would constitute a speculative activity.
- program trading and "bought" deals. If a fund buys a complete portfolio, it's unlikely to want to retain all the stocks in the deal. Some will have to be unloaded quickly. If that marginal short-term trade is considered taxable, it would alter the entire economic framework of the decision-making process.
- stock lending. While such loans to market makers could be very helpful in ensuring liquid markets; the "profits" are taxed, so pension funds avoid it. This might have contributed to problems after the Oct. 19 crash.

Said Clive Gilchrist of the $3.5 billion Merchant Navy Fund, Leatherhead, Surrey: "As an asset manager, I welcome the Inland Revenue's wish to clear up uncertain points of law. It is attempting to find out about and understand the investment strategy of pension funds. This clarification, if it can be done, will lift a cloud from the decision-making process."

But Colin Lever, senior partner of consulting actuaries Bacon & Woodrow, London, said: "There would have been easier and less painful ways for the Revenue to find out what was going on, if that was what they wanted.

"As it was, they created a lot of unnecessary worry and uncertainty. Nobody knew what they were up to or why, and there was no way to talk to them. All this shadow-boxing has wasted much management time." ■

*Nick Ryan is University Superannuation officer of the University of London and secretary to the trustees of its pension plan, the Superannuation Arrangement of the University of London. He is a member of the Investment Committee of the National Association of Pension Funds (NAPF). Where an unattributed opinion is expressed in this article, the views are the author's and do not necessarily coincide with those of the university, the plan trustees or the NAPF.*

# Small-cap prospects

*Continued from page 17*

But foreign small-cap stocks are not for everyone, consultants and managers agreed. Those funds attracted to the area typically have several years' experience in international equities, are large enough to diversify their equity styles and view small-cap as a long-term investment.

Nevertheless, the returns can be spectacular. For the one- and two-year periods ended Dec. 31, Dimensional Fund Advisors Inc.'s $60 million Japan index fund returned 83.8% and 63.3% annually, respectively, compared with 32.5% and 55.1% for larger-cap Japanese stocks, said David Booth, chairman and chief executive officer of the Santa Monica, Calif.-based firm.

In the long run, foreign small-cap stocks have outperformed their large-cap counterparts.

In Japan, the lower half of the Tokyo Stock Exchange in terms of market capitalization has returned 28.8% a year from 1970 through 1987, measured in U.S. dollar terms, while the upper half returned 22.7% annually during the same period, according to DFA.

Meanwhile, in the United Kingdom, the Hoare Govett Smaller Companies Index showed a 20.6% annualized return from 1955 through 1987, fully 14 percentage points better than the Financial Times All-Share's 6.2% return. During 1987, small-cap stocks turned in one of their best performances, returning 21.1% compared with the FTA's 7.9%.

Canadian small-cap stocks have generated an annual average return of 12.2% since 1970, nearly double the 6.5% return enjoyed by the Toronto Stock Exchange 300 index, according to Burns Fry Ltd., Toronto.

The evidence stops there as similar data is not available for other markets. Anyway, lower average capitalization sizes in many other markets make such comparisons meaningless, where all but a few stocks may qualify as small-cap.

Thus, some small-cap managers make their biggest bets in Japan and the United Kingdom, with smaller allocations in Europe or among emerging markets.

PCM International, Newark, N.J, has more than 45% of its small-cap portfolio invested in Japanese stocks, with about 18% in the United Kingdom and the rest spread among continental Europe and other Southeast Asia markets, said Cassandra Hardman, portfolio manager.

Small-cap stocks hold out the seemingly contradictory prospect of higher returns for lower risk or the same level of risk, according to some.

For the 18-year period ended Dec. 31, the standard deviation for Japanese small-cap stocks was 25%, compared with large-cap stocks' 23.4%, according to Dimensional Fund Advisors. In the United Kingdom, they were nearly tied, with 31.5% for small-cap stocks and 31.3% for large-cap stocks.

Meanwhile, correlations of foreign small-cap stocks with the Standard & Poor's 500 index are even lower than for large-cap stocks, meaning investors can obtain even greater diversification, according to Mr. Booth.

In dollar terms, the correlation of Japanese small-cap companies is .137 vs. .237 for large-cap stocks; in the United Kingdom, the correlation is .266 for small-cap stocks and .334 for large-cap stocks.

The biggest concern is liquidity, especially in light of the October market crash when trading smaller-cap stocks was virtually impossible. Size limits also are a factor.

"We cannot run $2 billion in small-cap," said Barry Gilman, managing director and chief executive officer of PCM International, which has about $20 million invested in foreign small-cap stocks, including an $8 million portion of a mutual fund run for its parent, Prudential Insurance Co. of America.

In addition, the markets in which managers purchase small-cap stocks are limited. After Japan and the United Kingdom, the choice falls off sharply. Much of Europe has not been hospitable to small- cap stocks, although that might be changing in light of new cross-border takeover activity, new tax incentives and efforts toward a unified market in 1992. ■

# Index funds

*Continued from page 17*

would be expected in specialized index funds, such as those tracking South Africa-free holdings or small-capitalization stocks, it also occurs in funds tracking EAFE.

Blake Grossman, vice president of Wells Fargo, noted because the EAFE index's total return doesn't deduct withholding taxes, "you'd expect a perfectly managed index fund to slightly underperform the index because of withholding taxes."

Cash flow, how income is treated (i.e. whether gross or net dividends are reinvested) and how often a fund is rebalanced can affect returns, said Chase's Mr. Massare.

Portfolios using sampling require more rebalancing and therefore incur more transaction costs, State Street's Mr. Lopardo said.

Tracking methods that aim to curb expenses can cause biases toward large-capitalization stocks because trading small-cap stocks is more costly.

Chase keeps neutral market weights but "optimizes" its EAFE portfolio by buying a smaller number of stocks, said Mr. Massare. "There can tend to be more large stocks, but we try to control that," he added.

Mr. Lopardo said the size of the fund keeps trading costs down. In 1987, 30% of stocks bought for new clients were crossed with stocks traded by existing State Street clients. One swap saved a client $800,000, he said.

The economies of scale attract clients. The firm's international assets tripled in 1985 and in 1986 and grew 50% last year.

He said State Street's commingled fund was able to perfectly track the EAFE over nine years largely because of the economies gained through its tremendous size.

But Jim Kartalia, vice president and director of marketing of American National Bank & Trust, argued small is better: "At our size, it's a lot easier to buy and sell stocks with little market impact." The firm's $220 million index fund excludes illiquid markets and stocks.

Other firms running international index funds for U.S. clients include Alliance Capital Management Corp., New York, which offers a South Africa-free EAFE fund; Bankers Trust Co. — Investment Management Group, New York; The Boston Co. Inc., Boston, which offers individual country index funds; Boston International Advisors Inc., Boston; County NatWest Investment Management Ltd., London; Dimensional Fund Advisors Inc., Santa Monica, Calif., which indexes small-capitalization stocks; Mellon Capital Management, San Francisco, which uses Salomon Russell Global indexes; Northern Trust Co., Chicago, which indexes stocks but actively weights countries; and the Travelers Cos., Hartford, Conn., which uses Financial Times Actuaries World Indexes. ■

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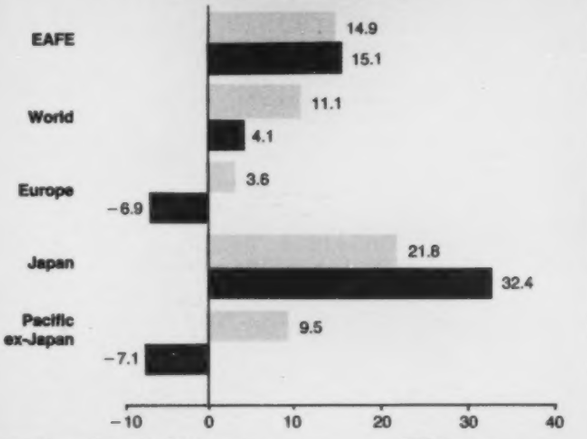
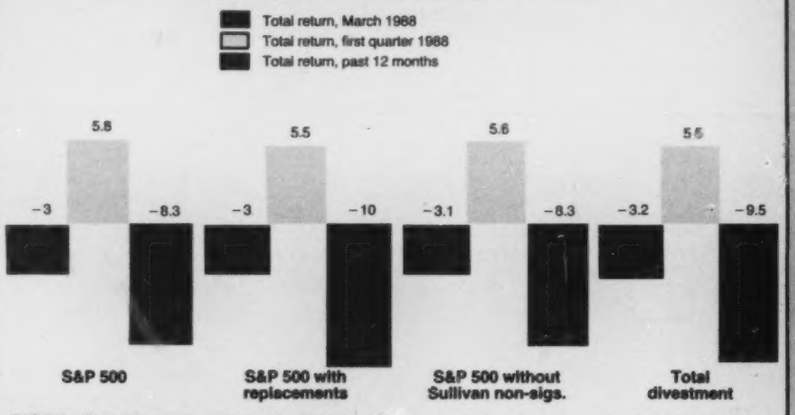
# STATISTICALLY SPEAKING

## Morgan Stanley Capital International worldwide indexes




Source: Morgan Stanley Capital International
Indexes are in U.S. dollar terms without dividends reinvested

## South Africa Free Index

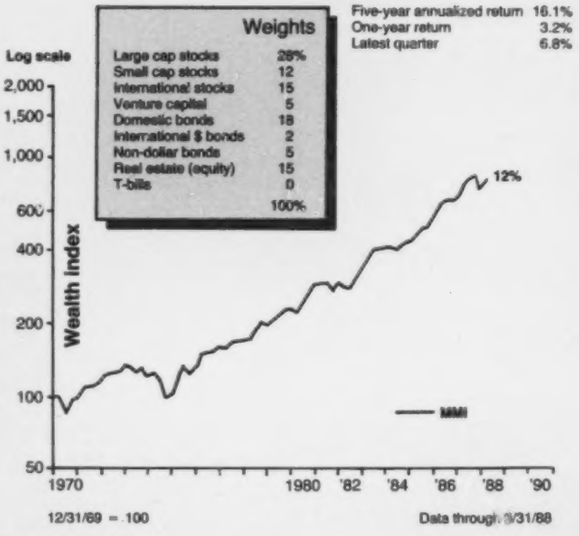



**S&P 500 with replacements:** replaces a South Africa-rel[illegible]ompany with next largest company in the industry. **S&P 500 without Sullivan non-signatories:** excludes 20 com[illegible]s, no replacements. **Total divestment:** eliminates all companies with South Africa involvement, no replacements.

Source: Wilshire Associates, Santa Monica, California

## Multiple Markets Index

The Multiple Markets Index is a benchmark for total portfolio returns. It is composed of eight asset classes used by retirement plan executives; it is calibrated to reflect the same degree of risk of the typical pension portfolio; it uses passive fixed policy weights; and it represents the individual asset classes by the broadest and most complete market return data available.




| Weights | |
|---|---|
| Large cap stocks | 28% |
| Small cap stocks | 12 |
| International stocks | 15 |
| Venture capital | 5 |
| Domestic bonds | 18 |
| International $ bonds | 2 |
| Non-dollar bonds | 5 |
| Real estate (equity) | 15 |
| T-bills | 0 |
| | 100% |

| | |
|---|---|
| Five-year annualized return | 16.1% |
| One-year return | 3.2% |
| Latest quarter | 6.8% |

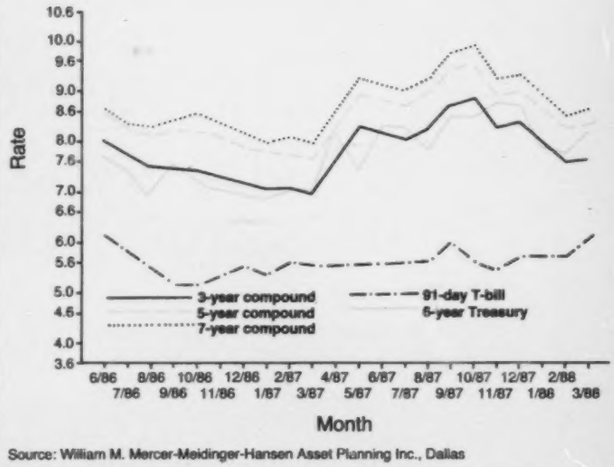
12/31/69 = 100

Data through 3/31/88

Source: First Chicago Investment Advisors, Chicago

## Summary of average bullet GIC data vs. market yields

**($1 million contract)**




Source: William M. Mercer-Meidinger-Hansen Asset Planning Inc., Dallas

## First quarter 1988 returns

| | Russell 3000® | Russell 1000® | Russell 1000® by market capitalization | | | | Russell 2000® |
|---|---|---|---|---|---|---|---|
| | | | Large | Medium/large | Medium | Medium/small | |
| Technology | -2 % | -3.7% | -7.1% | -3.9% | 5.2% | 9.5% | 14.7% |
| Health care | 7.6 | 6 | 4.3 | 5.1 | 15.4 | 11.4 | 23.7 |
| Consumer discretionary | 13.7 | 12.2 | 2 | 13.6 | 13.8 | 18.1 | 24.2 |
| Consumer staples | 4.5 | 4.2 | -0.5 | 7 | 13.2 | 13.5 | 17.3 |
| Integrated oils | 15.7 | 15.6 | 14.6 | 25.5 | 7.8 | 29.8 | 42.5 |
| Other energy | 11.8 | 11.2 | NA | 11.6 | 9.5 | 16.2 | 15.6 |
| Materials and processing | 7.2 | 6 | -6.6 | 3.9 | 9.9 | 15.5 | 17.1 |
| Producer durables | 8.5 | 7.2 | -9.3 | 9.8 | 13.2 | 11.7 | 19.3 |
| Auto and transportation | 14.9 | 14.3 | 12.8 | 9.6 | 21.3 | 17.1 | 23.9 |
| Financial services | 8.3 | 8 | -1.9 | 4.2 | 10.2 | 12.6 | 13.1 |
| Utilities | 5.3 | 4.9 | 4 | 2.9 | 8.1 | 8.9 | 17.2 |
| Total | 7.8 | 6.8 | 2.2 | 6.6 | 11.2 | 14 | 18.7 |

Source: Frank Russell Co., Tacoma, Wash.

# Energy stocks perform best

By Trudy Ring

KANSAS CITY, Mo. — Energy stocks were the market's best performers in the first quarter, while telephone bonds led all fixed-income sectors, according to the quarterly analysis by DeMarche Associates.

For the 12 months ended March 31, energy stocks also had the best performance, while Yankee and foreign issues led the bond market despite their poor performance in the most recent quarter.

Energy stocks in the Standard & Poor's 500 stock index gained 13.4% in price in the quarter, while the entire index gained just 4.7%. Stock performance figures are price appreciation only; bond figures are total return. Equities in the energy sector lost 3.8% in the 12-month period, while the S&P 500 declined 11.6%.

The energy sector consists of stocks in domestic and international oil companies and oil services and equipment.

Stocks related to consumer spending were second for the quarter with a gain of 8%. For the 12-month period, they declined 11.4%. This sector includes household goods, food and beverage, tobacco, textile and retail stocks.

Basic industry stocks, 1987's best performers, fell to third in the quarter with a 4.3% gain. For the 12 months ended March 31, they declined 9.8%. Automotive, building materials, chemical, electrical equipment, metals and transportation companies are in this category.

Stocks sensitive to interest rates gained just 2.6% in the first quarter, after leading the market in the previous quarter. For the 12 months, these stocks were down 13.4%. The sector consists of banks, savings and loans, insurance companies and large gas and electric utilities.

Technology stocks had the quarter's worst performance, a decline of 1.2%. For the year ended March 31, they also came in last, down 16.4%. Aerospace, drug, electronics and office-equipment companies are in this group.

The 10 best-performing industries in the quarter were building materials, up 33.1%; textile products and apparel, up 27.3%; oil service and equipment, up 24.6%; special machinery, up 20.8%; integrated domestic oil, up 20.4%; air transportation, up 20.1%; retail sales, up 18.1%; auto parts and accessories, up 17.4%; aerospace, up 15.1%; and automotive — cars and trucks, up 14.1%.

The 10 worst-performing industries were office equipment, down 7.9%; aluminum and copper, down 6.9%; consumer household products, down 4.9%; electrical equipment, down 4.7%; consumer non-durables, down 2.3%; media, down 0.1%; chemicals, up 0.1%; paper, up 0.3%; electric utilities, up 0.9%; and beverages, up 1%.

The quarter's top 10 individual stocks were **Roper Corp.**, up 254.8%; **Firestone Tire & Rubber Co.**, up 149.2%; **J.P. Stevens & Co. Inc.**, up 123.7%; **Federated Department Stores Inc.**, up 121.7%; **Tektronix Inc.**, up 114.1%; **American Standard Inc.**, up 109.9%; **Koppers Co. Inc.**, up 83.3%; **Colt Industries Inc.**, up 82.1%; **Lucky Stores Inc.**, up 80.1%; and **Mohasco Corp.**, up 76.2%.

Besides analyzing the S&P 500 stocks by sectors, DeMarche also categorizes them by quality, growth and yield. As rated by quality of the issuing companies, below-average quality stocks performed best in the first quarter, gaining 9.3%.

As ranked by growth, variable growth stocks had the quarter's biggest gain, 6.3%. As rated by yield, the highest-yielding one-fourth of the market also had the best price gain, 7.9%.

In the bond market, telephone company bonds led for the quarter, with a return of 4.5%. The DeMarche Pension Fund Bond Index of 6,000 issues was up 4%.

Telephone issues had the poorest performance for the 12 months ended March 31, returning 2.7%. The DeMarche index was up 4.9% in that period.

Canadian issues ranked second in the quarter with a 4.4% return. For the year, they returned 4.6%. Utility bonds gained 4.3% in the quarter and 4% for the year.

U.S. government issues and industrial bonds each returned 4% in the quarter; their 12-month returns were 9.7% and 9.5% respectively. Financial company bonds returned 3.8% for the quarter and 5.8% for the year.

Yankee and foreign issues were the poorest performers in the quarter, returning 3.4%, but best for the 12 months, returning 7.3%. They had been the best performers of 1987.

As ranked by quality, below-average bonds had the quarter's best return, 4.3%. As rated by maturity, bonds in the 10- to 20-year range performed best, as they were up 4.5%. Bonds combining the characteristics of these categories had the best return, 5.3%, when ranked by quality and maturity combined. ■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# Funds select Hanseatic to hedge assets

LOS ANGELES — Whittaker Corp. hired Hanseatic-American Group Inc., Albuquerque, N.M., to hedge pension and 401(k) assets with an alternative to portfolio insurance, said Joseph Kleiman, a retired Whittaker senior vice president and consultant to the plans.

Hanseatic-American will provide an overlay hedging strategy, using stock index options, on about $60 million of the $100 million pension fund and $10 million of the $30 million 401(k) plan.

The manager will hedge, only when predicting a down market, by buying put options and selling call options. It will have authority to use futures to simulate options, but only if it cannot move in the options market, Mr. Kleiman said.

Whittaker formerly hedged the assets with a portfolio insurance program run by Oppenheimer Capital Corp., New York. Portfolio insurance, involving the sale of stock index futures in response to a portfolio decline, cushioned the fund somewhat in the October stock market decline, but didn't work as well as promised, he said.

The portion of the pension fund not covered by the Hanseatic-American hedging program is run by Kennedy Capital Management, St. Louis, and Davis, Weaver & Mendel Inc., Atlanta. ■

# GIC rates tumble

## Stable period to follow sharp decline

By Curtis Vosti

Rates on insurance company guaranteed investment contracts declined sharply at the beginning of the year, but observers say rates have firmed up as 1988 enters its second quarter.

"Basically, we saw a significant drop in the first quarter of the same magnitude as that of Black Monday (Oct. 19) but it was spread over a month and a half instead of a day," said Peter Bowles, president of Fiduciary Capital Management Inc., Woodbury, Conn. "Since then, there has been relatively little activity."

The drop coincided with what analysts say continues to be a strong demand for GICs, exacerbated by the Oct. 19 market fall.

Window GICs purchased shortly after the crash flooded the market in January, said Scott Sokol, director of investments for Chambers, Dunhill, Rubin & Co., Beverly Hills, Calif.

"Plans which were planning on transferring $1 million or so ended up having to transfer double or triple that amount" because employees were switching from equity investments in their 401 (k) plans, Mr. Sokol said.

He said some insurance companies suffered losses at the beginning of the first quarter because they had to hedge more than anticipated to cover the flood of GIC money at the turn of the year.

Messrs. Sokol and Bowles said, however, the use of GICs and similar instruments should continue to expand even though insurance companies have capacity limitations.

"The industry is reacting as you would expect," said Mr. Bowles. "The capacity is continuing to expand in a variety of forms."

The first quarter also saw a narrowing in the spread between GICs and Treasury securities of similar maturity by as much as 80 to 100 basis points, he said.

"What used to be 150 (basis point spread) on a five-year deal, you're lucky to get 70," said Mr. Sokol.

John Knight, president of Lamberson Knight Securities, a Short Hills, N.J.-based GIC brokerage, said he expects the second quarter to be less volatile, with rates fluctuating only about 30 to 40 basis points.

"At the beginning of the (first) quarter, the market had great expectations," Mr. Knight said. But concerns over renewed inflationary pressures dropped rates during the quarter until "right around March 1 when it turned around," he said.

Figures from William M. Mercer-Meidinger-Hansen Asset Planning, Dallas, show the average rate for a three-year, compound $1 million GIC March 4 was 7.52%; by April 1, it was 7.78%.

In December, the average rate was 8.39%.

"There may be some additional firming of rates, but this being an election year, you never know," Mr. Bowles said. "GICs are going to follow the general trend of traditional rates, though they don't go in lockstep with the other rates. I think the Fed is a major factor, no matter what you're talking about."

"I think you'd be throwing darts at a wall to figure that one out," Gene L. Gochenour, president of GIC Inc., Beaverton, Ore., said of the role of the an election-year Fed on interest rates.

GIC Inc. and Lamberson Knight provide insurance company rate quotations on representative five-year, single-deposit, simple-interest, $1 million GICs as follows:

- Allstate Life Insurance Cos., Northbrook, Ill.: March 31, 8.41%; Dec. 31, no quote.
- American United Life Insurance Co., Indianapolis: 8.36%; 8.7%.
- Bankers Life Assurance Co., Des Moines, Iowa: 8.12%; 8.53%.
- Canada Life Assurance Co., Toronto: 8.6%; no quote.
- Confederation Life Assurance Co., Toronto: 8.85%; 9.3%.
- Connecticut Mutual Life Insurance Co., Hartford: 8.37%; 8.56%.
- Crown Life Insurance Co., Toronto: 8.25%; 8.77%.
- Great West Life Assurance Co., Denver: 8.06%; 8.59%.
- Hartford Insurance Group, Hartford, Conn.: 8.55%; 8.85%.
- Home Life Insurance Co., New York: 8.21%; 8.64%.
- John Hancock Mutual Life Insurance Co., Boston: 8.41%; 8.53%.
- Life Insurance Co. of Virginia, Richmond: 8.7%; 8.48%.
- Massachusetts Mutual Life Insurance Co., Springfield: 8.13%; 8.62%.
- Minnesota Mutual Life Insurance Co., St. Paul: 8.63%; 9.31%.
- Mutual Benefit Life Insurance Co., Newark, N.J.: 8.3%; 8.75%.
- Mutual of New York, New York: 8.35%; 8.54%.
- New England Mutual Life Insurance Co., Boston: 8.02%; 8.66%.
- New York Life, New York: 8.35%; 8.8%.
- Northwestern National Life Insurance Co., Minneapolis: 8.37%; no quote.
- Ohio National Life Insurance Co., Cincinnati: 8.75%; 9.22%.
- Pacific Mutual Life Insurance Co., Newport Beach, Calif.: 7.92%; 8.48%.
- Pan American Life Insurance Co., New Orleans: 8.69%; 8.89%.
- Penn Mutual Life Insurance Co., Philadelphia: 8.82%; 9.12%.
- Phoenix Mutual Life Insurance Co., Hartford, Conn.: 8.5%; 8.94%.
- Provident Mutual Life Insurance Co., Philadelphia: 8.46%; no quote.
- Provident National Assurance Co., Chattanooga, Tenn.: 8.37%; no quote.
- SAFECO Corp., Seattle: no quote; 9.4% (Jan. 11).
- Southwestern Life Insurance Co., Dallas: 8.66%; 8.75%.
- State Mutual of America, Worchester, Mass.: 8.35%; 8.65%.
- SunLife of Canada, Wellesley, Mass.: 8.7% (March 29); 9.2% (Jan. 11).
- Union Central Life Insurance Co., Cincinnati: 8.63%; 8.83%.

Mercer-Meidinger-Hansen also surveys insurance companies for rate quotations, but does not identify the companies. A summary of various bullet GICs for March is as follows:

- Three-year, $1 million, compound: high, 8.23%; low, 6.83%; average, 7.65%.
- Three-year, $1 million, simple: high, 8.21%; low, 6.67%; average, 7.62%.
- Five-year, $1 million, compound: high, 8.94%; low, 7.52%; average, 8.31%.
- Five-year, $1 million, simple: high, 8.96%; low, 7.2%; average, 8.25%.
- Seven-year, $1 million, compound: high, 9.3%; low, 7.83%; average, 8.65%.
- Seven-year, $1 million, simple: high, 9.35% low, 7.7%; average, 8.54%.
- Three-year, $5 million, compound: high, 8.19%; low, 7.01%; average, 7.68%.
- Three-year, $5 million, simple: high, 8.21%; low, 6.85%; average, 7.65%.
- Five-year, $5 million, compound: high, 9.04%; low, 7.58%; average, 8.38%.
- Five-year, $5 million, simple: high, 8.99%; low, 7.57%; average, 8.31%.
- Seven-year, $5 million, compound: high 9.34%, low, 7.87%; average, 8.71%.
- Seven-year, $5 million, simple: high, 9.35%; low, 7.8%; average, 8.58%.

Dietrich & Associates, a Blue Bell, Pa.-based GIC brokerage firm, provided the following rate spread data between a $1 million five-year, simple interest GIC and the average Treasury note of the same maturity for 1988's first quarter:

- Jan. 4: GIC, 9.3%; T-note, 8.45%.
- Feb. 1: GIC, 8.60%; T-note, 7.74%.
- March 1: GIC, 8.65%; T-note, 7.64%.

The same information for the previous three quarters was:

- Dec. 9, 1987: GIC, 9.28%; T-note, 8.59%.
- Sept. 2, 1987: GIC, 9.5%; T-note, 8.59%.
- June 2, 1987: GIC, 9.05%, T-note, 8.19%. ■

## Air Products names exec

ALLENTOWN, Pa. — Raymond A. Glennon has been named assistant treasurer of Air Products and Chemicals Inc., replacing David H. Kelly, who will remain an assistant treasurer but focus on corporate finance.

Mr. Glennon has been with Air Products 14 years. He most recently was director of its federal government relations office in Washington. He also has managed the employee benefits department and has had positions in tax, controllership and investor relations.

In his new position, Mr. Glennon is responsible for the investment of the company's $700 million in pension plan assets.

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## Money managers rate America's best managed companies*

Vagelos

### First

**Merck & Co. Rahway, N.J.**
**Roy Vagelos, chairman, pres. & CEO**
1987 cash compensation: $1,371,817 (includes bonus and deferrals)
**Institutional holdings:** 526 managers
**Shares held:** 52%, 136.7 million

| | 1987 | 1986 | 1985 |
|---|---|---|---|
| Net income | 906.40M | 675.70M | 539.90M |
| Revenue | 5.10B | 4.10B | 3.50B |
| EPS | 6.68 | 4.85 | 3.79 |

Common stock: 1987 low: 122 — high: 209 3/4
1986 low: 67 1/8 — high: 129 1/2

### Second

**General Electric Co. Fairfield, Conn.**
**J.F. Welch, chairman & CEO**
1987 compensation: $2,056,887
**Institutional holdings:** 644 managers
**Shares held:** 44%, 915.3 million

| | 1987 | 1986 | 1985 |
|---|---|---|---|
| Net income | 2.90B | 2.50B | 2.3B |
| Revenue | 40.50B | 36.70B | 29.2B |
| EPS | 3.20 | 2.73 | 2.5 |

Common stock: 1987 low: 38 2/4 — high: 66 3/8
1986 low: 33 1/4 — high: 44 3/8

Welch

Glass

### Third

**Wal-Mart Stores Inc. Bentonville, Ark.**
**S.M. Walton, chairman & CEO**
Cash compensation: $325,000*
**David D. Glass, president & COO**
1987 cash compensation: $488,000
**Institutional holdings:** 355 managers
**Shares held:** 31%, 564.5 million

| | 1987 | 1986 | 1985 |
|---|---|---|---|
| Net income | 450.10M | 327.50M | 270.80M |
| Revenue | 11.90B | 8.40B | 6.40B |
| EPS | 1.59 | 1.16 | 0.96 |

Common stock: 1987 low: $30 -- high: $53.88
1986 low: $21.81 — high: $33.88

* data for fiscal year ended Jan. 31, 1987

Quinlan

### Fourth

**McDonald's Corp. Oak Brook, Ill.**
**Fred L. Turner, chairman**
1987 cash compensation: $166,198 salary; $356,250 bonus; $27,552 deferred
**Michael R. Quinlan, president & CEO**
1987 cash compensation: $449,948 salary; $270,000 bonus; $80,052 deferred
**Institutional holdings:** 435 managers
**Shares held:** 52%, 189.7 million

| | 1987 | 1986 | 1985 |
|---|---|---|---|
| Net income | 596.40M* | 479.70M | 433.00M |
| Revenue | 4.90B | 4.20B | 3.80B |
| EPS | 3.14* | 2.48 | 2.22 |

Common stock: 1987 low: 31 3/8 — high: 61 1/8
1986 low: 32 1/2 — high: 51 1/8

* The 1978 net income and EPS figures reflect the cumulative prior year's effect of the change in accounting for income taxes.

### Fifth

**Digital Equipment Corp. Maynard, Mass.**
**Kenneth H. Olsen, president**
Cash compensation: $905,706*
**Institutional holdings:** 504 managers
**Shares held:** 73%, 126.8 million

| | 1987 | 1986 | 1985 |
|---|---|---|---|
| Net income | 1.10B | 617.40M* | 446.70M |
| Revenue | 9.40B | 7.60B | 6.70B |
| EPS | 8.53 | 4.81 | 3.71 |

Common stock: 1987 low: 81 3/4 — high: 174 1/2
1986 low: 45 7/8 — high: 93 5/8

* for fiscal year ended June 27, 1987

Olsen

* The institutional holdings are based on Spectrum, as of Dec. 31, 1987. Salaries were taken from the latest proxy statements.

# Merck tops best list

*Continued from page 1*
investment management unit of MCorp.

Merck produces human and animal health products as well as specialty chemicals that have application in water treatment, food processing, skin care and other fields.

Merck, Rahway, N.J., reported gains in income in 1987 because of such products as Vasotec, used to control high blood pressure, and Pepcid, a drug used to treat ulcers. The company also gained from sales of Recombivax HB, a hepatitis B vaccine made with recombinant DNA technology.

"The dedication of Merck's management team to building shareholder value was tangibly demonstrated in the major stock repurchase program (of $1 billion) and the maximization of sales growth for new products and even those that are more mature," according to a Goldman, Sachs & Co. report on the company.

The company's 1987 "financial results make delightful reading," said Neil B. Sweig, an analyst at Prudential-Bache Securities Inc., New York. Mr. Sweig, in a recent report, recited the good news about Merck in 1987: a 35% increase in operating income and a 37.7% increase in earnings per share.

The report also lauds the 7.9% increase in cost of goods, 28.5% of sales compared with 32.4% in 1986. This performance is "possibly (a) unique control of manufacturing costs for so large a company growing so rapidly."

Merck's future looks bright, Wall Street analysts say. If new drugs are as successful as expected, earnings per share should double by 1990, according to Cowen & Co. Institutional Services, Boston.

* * *

**General Electric** ranked high in the survey because of the company's nimble acquisition and divestiture of assets.

In 1987, for example, GE acquired CGR, a European-based medical diagnostics imaging business, from Thomson S.A. of France. In exchange, Thomson received GE's consumer electronics business.

This move bolstered GE's global medical systems business while allowing it to divest a business no longer considered strategically important, according to GE's annual report.

The company's varied mix of businesses insulate it from the dangers of recession. About 40% of its earnings come from units that do not track the general economic cycle — aircraft engines, aerospace, electric utility equipment and medical equipment — according to a report by H.P. Smith, analyst at Smith Barney, Harris Upham & Co., New York.

Although GE has reshaped itself substantially in the past few years, the company still has an appetite for acquisitions. "They will continue to make acquisitions that fit with their existing operations," said Linda M. Shuman, an analyst at Prudential-Bache.

Ms. Shuman praised GE's strategy, saying its acquisitions resulted in valuable synergies and leading positions in many markets.

"We have been a long-term holder of GE. I have high regard for Jack Welch (chairman and chief executive officer of GE). He's a good manager and has focused on the areas he wants to be in, divests of the others and pushes for profitable growth," said Grafton M. Potter, vice president and director of research, United Missouri Investment Counsel Service, Kansas City, Mo.

* * *

**Wal-Mart Stores**, a national discount department store chain based in Bentonville, Ark., took third in the survey.

Money managers credited the management team led by Sam M. Walton, chairman and chief executive officer and pioneer of the strategy of offering name-brand merchandise at low prices.

"Wal-Mart Stores' strategy has involved meticulous attention to detail and good old-fashioned business execution," said Eldon C. Mayer Jr., president and chief investment officer, Lynch & Mayer, Inc., New York. "They have decided to always be reducing prices. You can only do that by making a religion out of keeping costs down. They are many times better than the next best company in the retail industry."

Mr. Mayer said Wal-Mart stock, now selling at more than 20 times earnings, has been a cornerstone of the firm's investment portfolio. "We've owned them for years and never had a disappointing quarter," he added.

The company has performed admirably through the years, repeating a string of strong earnings reports. Net sales for the fiscal year ended Jan. 31, 1987, surged to record levels of $11.9 billion, up from $8.45 billion a year earlier. Net income for fiscal 1987 rose to a record $450 million, up from the previous year's record of $327 million, thanks in part to an aggressive sales and expense control program. Net income per share increased to $1.59 from $1.16 the year before. Operating expenses as a percentage of sales declined throughout the year. Shareholder equity, which in fiscal year 1986 exceeded $1 billion for the first time, grew an additional 32% in fiscal 1987 to $1.7 billion from $1.3 billion.

The growth and renovation program planned in fiscal 1988 includes the addition of 125 Wal-Marts, 20 Sam's, and the expansion or relocation of 55 older Wal-Mart stores.

Stephen F. Mandel, who follows Wal-Mart for Goldman, Sachs & Co., estimated in a recent report that earnings growth during the next five years will be about 20% to 25% annually. Although that range doesn't equal the 30%-plus rate Wal-Mart investors have seen historically, Mr. Mandel said it represents about three times the rate of the market.

"Its growth record almost speaks for itself," said Mr. Potter of United Missouri. "They've handled very rapid expansion very well," he said.

* * *

Investment managers rated **McDonald's** fourth among the five best managed companies they selected.

Noting most of the restaurant industry is in the doldrums, they pointed to McDonald's as a standout. They rang off a long list of attributes, including the vision and innovation of management, menu innovation, strong real estate management and operational efficiency that has been achieved throughout the company.

"Through competence and innovation, McDonald's has remained the quintessential company in a difficult industry. It has a superior record and has enjoyed continued success," said Peter Schliemann, senior vice president and director of research at David L. Babson & Co., Boston. "It's an excellent stock. Earnings come in strong year in and year out and it's a financially strong company."

Because of higher sales by existing restaurants, new restaurant expansion and the effect of stronger foreign currencies, McDonald's systemwide sales were up 15% to $14.3 billion in 1987 from $12.4 billion in 1986. Foreign sales also rose to $3.7 billion from $2.9 billion. Total revenue was up 15% to $4.9 billion from $4.2 billion, while net income also rose to $596 million from $480 million in 1986.

The food company's growth strategy focuses on adding more than 500 restaurants per year, with about 60% in the United States and 40% overseas. This year, McDonald's expects to open its first restaurants in Yugoslavia, Hungary and South Korea.

"McDonald's is poised to capitalize on its strong 1987 operating performance and should pick up additional market share in 1988. We anticipate that in 1988, the company will utilize a lower tax rate, cost savings from its new in-store processor and a strong promotional lineup to keep pressure on its fast-food rivals," Jay H. Freedman, who follows the company for Kidder, Peabody, said in a recent report. "With the aid of tax reform, which alone should boost the company's 1988 earnings by roughly 7.5%, and a normal year of new unit openings, McDonald's is virtually assured of a solid 12%-plus earnings gain for the upcoming year."

* * *

**Digital Equipment**, the computer manufacturer, was ranked fifth.

As was the case with McDonald's, money managers credited the company with performing well in a highly competitive and uncertain industry. While the stock has not been performing well of late, money managers said Digital's strategy would pay off in the long term even though the company now is out of favor.

"Over the years it's been one of the larger companies in the industry gaining market share in a tough competitive industry," said Jim Holmes, managing director, Dreman Value Management, New York. "They do it not by being the fanciest company but by offering quality products that meet their customers needs."

His firm only recently began buying Digital stock, which is relatively cheap, selling for about 9.5 times earnings. "They have good profit margins in an industry where profit margins are all over the board. The typical growth rate (for Digital) is 15% to 20% a year," Mr. Holmes said.

Third-quarter results for Digital, whose 1988 fiscal year ends in June, were considered decent on Wall Street, but clearly were affected by various industry pressures. Total revenue grew 17.2%, to $2.8 billion from $2.4 billion the prior year, while earnings per share showed only a fractional gain. Corporate orders rose about 19% worldwide.

George Elling, who follows the company for Merrill Lynch Capital Markets, said in a recent report the major disappointment during the third quarter was product sales grew only 12.4%, reflecting the hesitancy being expressed by minicomputer customers, especially for high-end systems. Margins were under pressure too. Mr. Elling looks for fourth-quarter earnings to exceed the $2.85 reported in the fourth quarter of fiscal 1987.

"From a stock standpoint, we believe that the bad quarter is now out and much will depend on whether Digital's U.S. customers regain confidence in the economy and begin to commit to high-end systems," the report said. ■

# Market crash still being felt

By Brad Rudin

Although first-quarter financial results suggest some securities firms are still battling the effects of Black Monday, Morgan Stanley Group Inc. seems poised to turn in the kind of performance that made it the most profitable major securities firm last year.

Morgan Stanley boosted its first-quarter earnings 53% from the same period last year, while some of its Wall Street competitors — First Boston Inc., Merrill Lynch & Co. and PaineWebber Group Inc. — reported declining profits.

Net income slid 37% at Merrill Lynch, 36% at PaineWebber and 45% at First Boston.

The effects of last year's stock market plunge could be seen in reduced commission revenue at the retail-oriented firms. Reduced investment banking revenue undermined profitability at several Wall Street houses.

On the plus side, an upsurge in merger and acquisition activity boosted financial advisory revenue.

Principal transactions, which includes trading, risk arbitrage and other business for the firms' own accounts, also bolstered industry revenue.

"The one line that is better than everybody expected is the trading line," said Stephen J. Schwartz, an analyst at Shearson Lehman Hutton Inc. "A large portion of (the firms) were able to capitalize on the more positive fixed-income environment."

Several firms tried to buoy the bottom line with reductions in compensation and benefit expense. Comparing the first quarter of 1988 with the year-earlier period, compensation expense declined 32% at First Boston, 14% at Merrill, 4% at Salomon Inc. and less than 1% at PaineWebber.

Compensation and benefit expense increased 27% at Morgan Stanley. This item was not available for Shearson Lehman Hutton.

Salomon made a noteworthy comeback with a 16% increase in net income, which ended a nine-month decline in profitability.

Salomon's prospects for increases in profitability depend in part on the fixed-income markets, Mr. Schwartz said. "If rates really move up I doubt if they can sustain current levels, but I certainly think they will be profitable and make some nice money," he said.

Shearson Lehman Hutton saw profits increase almost 4% in the first quarter, the first period in which the firm's earnings from E.F. Hutton & Co. were included.

Merrill Lynch experienced a slide in earnings despite its position as the biggest underwriter of corporate securities in the first quarter. Investment banking revenue at the firm declined primarily because of "lower equity underwritings and the absence of any significant merger and acquisition transactions," according to a statement issued by the firm.

Merrill Lynch and PaineWebber will underperform the institutional-oriented investment banks because of the lack of retail business and the costs associated with the distribution system, according to a report issued last month by Mr. Schwartz.

"In our judgment, firms that focus on non-retail activities will continue to outperform not only because of the lower expense burden but also because of significant increases in certain lines of business, specifically (mergers and acquisitions), as well as a more positive fixed-income environment and potentially large risk arbitrage gains," the report said.

Although the investment banks with an institutional base are expected to report year-over-year earnings declines, these reductions in profitability will be more severe at firms with large retail branch networks, according to a report by Larry Eckenfelder, an analyst at Prudential-Bache Securities Inc.

Morgan Stanley attributed its first-quarter success to higher financial advisory revenue and debt underwriting fees, which offset a lower level of equity underwriting. The firm also reported revenue from sales and trading, asset management, foreign exchange and the commodities business contributed to the performance.

Investment banking revenue at Morgan Stanley increased 29%, to $197 million from $153 million, while revenue from principal transactions increased 16%, to $244 million from $211 million.

First Boston, which has been hurt by the defection of key investment bankers, sustained a 25% reduction in investment banking revenue in the first quarter. Trading losses in mortgage securities helped to shrink principal transaction revenue 31%, to $142 million from $207 million. ■

**First-quarter brokerage firm earnings**

| | Net income ($ thousands) | | Percent change | Earnings per share | |
|---|---|---|---|---|---|
| | 1988 | 1987 | | 1988 | 1987 |
| First Boston | 41,963 | 76,202 | −45 | 1.17 | 2.09 |
| Merrill Lynch | 68,260 | 108,622 | −37 | .61 | .97 |
| Morgan Stanley | 98,614 | 64,275 | 53 | 3.62 | 2.54 |
| PaineWebber | 20,761 | 32,597 | −36 | .48 | 1.02 |
| Salomon | 173,000 | 149,000 | 16 | 1.13 | .96 |
| Shearson Lehman Hutton | 81,000 | 78,000 | 4 | .81 | * |

* Shearson was not a public company in this period.

Source: Company data


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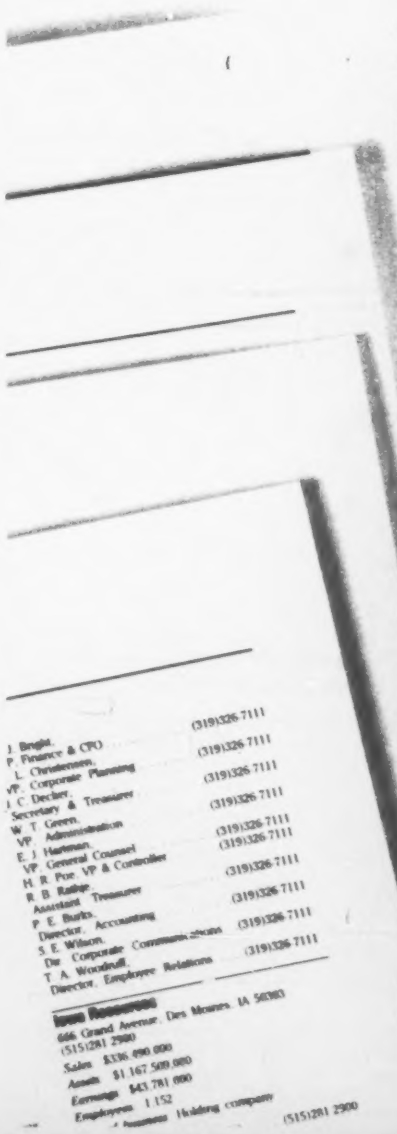


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# Credit quality takes dip

By Brad Rudin

Credit quality in the first quarter sagged under the weight of takeover activity and weakness in the industrial and financial services sector.

The combined downgrades assigned by the five major agencies exceeded the number handed out in the fourth quarter of 1987.

Although the number of downgrades suggested a marked decline in credit quality, downgrades as a percentage of total rating actions produced a less dire view.

Still, the data broadly show a continuation of the downward trend in credit quality.

"A major factor in downgradings continues to be takeover mania," William A. Cornish, the head of the rating committee at Duff & Phelps Inc., said in a statement issued by the Chicago-based credit rating agency.

The rising volume of corporate takeover activity and recapitalization programs will undermine credit quality for the rest of 1988, rating agency analysts said.

"Given the number of announced bids we are seeing and the huge amounts of new financing that will be required to bring them to fruition, we expect special events will account for more corporate downgrades this year than in 1987," said Harold H. Goldberg, a senior vice president at Moody's Investors Service, New York.

Special events — mergers, acquisitions and stock buybacks — accounted for 24% of the corporate downgrades in the first quarter, Moody's reported. It cited Eastman Kodak Co.'s acquisition of Sterling Drug Inc., Shearson Lehman Brothers Inc.'s purchase of E.F. Hutton & Co. Inc. and stock buybacks at Allied-Signal Inc. and Hospital Corp. of America as examples of ratings lowered as a result of special events.

Ratings slipped sharply in the industrial sector, Standard & Poor's Corp. reported in Credit Week, with downgrades exceeding upgrades by a 2.3-to-1 margin in the first quarter compared with 1.3-to-1 for all of 1987.

The cost-plagued health-care industry suffered a sharp decline in credit quality, Standard & Poor's reported. But the agency also noted improving credit quality among some of the basic-metals producers — Aluminum Co. of America, Bethlehem Steel Corp., Inland Steel Co. and Inco Ltd.

Overall, downgrades accounted for 55% of the rating actions at Duff & Phelps in the first quarter compared with 61% in the fourth quarter of 1987. At Fitch Investors Service, downgrades made up 64% of the rating actions in the first quarter vs. 65% in the preceding quarter. Downgrades at McCarthy, Crisanti & Maffei Inc. accounted for 88% of the rating actions in the first quarter compared with 52% in the fourth quarter.

Downgrades accounted for 69% of rating actions at Moody's in the first quarter compared with 79% in the last quarter of 1987. At Standard & Poor's, downgrades made up 69% of the first quarter rating actions vs. 68% in the preceding quarter. ■

**Corporate credit rating changes**

| | 1st quarter 1988 | | 4th quarter 1987 | |
|---|---|---|---|---|
| | Up | Down | Up | Down |
| Duff & Phelps | 20 | 24 | 12 | 19 |
| Fitch Investors Service | 5 | 9 | 6 | 11 |
| McCarthy, Crisanti & Maffei | 2 | 14 | 14 | 15 |
| Moody's Investors Service | 34 | 75 | 17 | 63 |
| Standard & Poor's | 57 | 127 | 33 | 71 |

Source: The rating agencies

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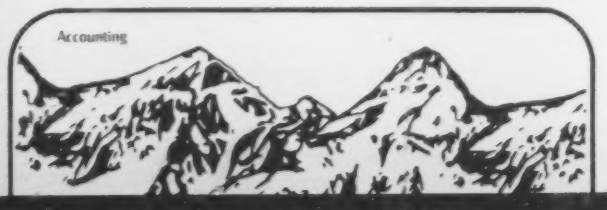


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# Buybacks

*Continued from page 1*

William F. Harnisch, president of Forstmann-Leff Associates Inc., New York.

But Charles Plohn, a managing director in the equity transactions group at Merrill Lynch Capital Markets, New York, said six months isn't long enough to measure the effect of buybacks.

"I don't think you can judge the results of things on the basis of a few months because I don't think that that should be the purpose of a buyback program. It should have longer-term implications," he said.

A study by Georgeson, published in the firm's quarterly newsletter, focused on the short-term results of stock buyback announcements. "(T)hese buybacks barely affected share prices," Georgeson concluded.

Georgeson, a proxy solicitation and investor relations firm, examined all 114 companies in the S&P 500 that announced buybacks between Oct. 20 and Oct. 30. In a comparison with the stock index, Georgeson found the average stock in this group underperformed the market by 0.7 percentage points on a market-weighted basis in the first week after the buyback announcement. The group of 114 companies outperformed the market by 1.1 percentage points in the two weeks following the announcement, Georgeson reported.

Georgeson confirmed these findings in a study of 255 exchange-listed companies that announced buyback programs during the two-week period after Black Monday.

These companies underperformed the S&P by 0.5 percentage points from Oct. 19 to Oct. 30. In the first four weeks after the announcements, these companies lagged the index by 0.1 percentage points.

Still, the wave of buyback announcements following Black Monday did exert a positive influence on the market, Georgeson said: "While shareholders of the companies may not have benefited directly, they and other shareholders as well benefited indirectly from stronger markets which resulted from the slew of repurchase announcements."

# IMI index futures contracts draw institutional concern

By Marlene Givant

Derivative contracts based on an international index with real-time pricing during the U.S. trading day are meeting skepticism from institutional investors.

The International Market Index was announced before Black Monday, but the Commodity Futures Trading Commission now is reviewing whether to allow a futures contract based on the International Market Index to trade on the Coffee Sugar and Cocoa Exchange. Meanwhile, the Securities and Exchange Commission is evaluating an IMI option that would trade on the American Stock Exchange, New York.

The CFTC has objected to proposed international-stock index contracts, such as futures on the Morgan Stanley Capital International Europe Australia Far East index, because of worries about pricing foreign indexes during trading hours in the United States while foreign markets are closed.

In addition, both the CFTC and SEC are concerned about how stock index derivative instruments address volatility in light of Oct. 19. The SEC has mandated that the AMEX adopt a surveillance agreement with key foreign exchanges on the IMI option, said Ivers Riley, AMEX senior vice president.

The IMI includes 50 blue-chip foreign stocks and large, high-quality American Depository Receipts, which are domestically traded receipts for shares of a foreign corporation. There are about 800 ADRs listed mainly on "pink sheets" which list quotations of over-the-counter stocks.

The index, which represents nine countries, would allow investors to manage international volatility with futures and options.

"If the existence of futures and options on domestic indexes makes perfect sense, then it makes sense on international too," said James Bowe, senior vice president of market development at the CSCE.

Institutions are concerned, however, the mostly ADR index might not generate sufficient support for a derivative market.

Meanwhile, the Chicago Mercantile Exchange is awaiting approval from the SEC and CFTC to trade futures and options and trade options on futures based on the EAFE index. The Chicago Board Options Exchange also might trade cash options based on the EAFE index.

Prices of EAFE stocks, which represent 19 countries, would be updated based on currency movements. IMI securities, which trade on the AMEX, New York Stock Exchange and the National Association of Securities Dealers Automated Quotations system, would be priced on a real-time basis.

Real-time pricing makes the IMI more attractive than existing international indexes that calculate prices at various points during the day, depending on the closing times of markets, Mr. Bowe said. Unlike existing indexes, the IMI reflects intraday currency fluctuations against the dollar in each of its securities' home markets.

Still, institutions aren't yet sold on the IMI concept.

Jeff Ricker, a consultant at Mellon Capital Management, San Francisco, which runs $19 billion for U.S. tax-exempt clients, said "we're pretty stuck on the (Standard & Poor's 500 stock index). We use the (Salomon-Russell Global index) for foreign stocks. To the extent ADRs are in those indexes, we would buy them."

Some investors might not like the IMI's large-capitalization emphasis. "The idea sounds interesting. Normally the problem of using an ADR portfolio is the large-cap bias. I suspect it is going to bother people," said Eric Seff, managing director of indexing and hedging of Chase Investors Management Corp. ■

# Coming back

*Continued from page 3*

500 would have ranked slightly above the median.)

"I'm a great fan of Dean LeBaron," Mr. English added. "He's on the leading edge of investments. I would recommend (the firm) to anyone."

The Ford Foundation, nevertheless, dropped Batterymarch.

Although Mr. English said the fund wanted to run more money internally, it still employs about a dozen outside managers. When asked why the fund chose to retain those managers over Batterymarch, Mr. English suddenly decided to end the conversation.

Consultants interviewed said they haven't recommended Batterymarch in searches. Only some would speak for attribution.

Mr. LeBaron noted Batterymarch's widely publicized practice of trading at low commissions would make it unattractive in any case to some consultants.

At Lockheed Corp., Calabasas, Calif., which has a $5.5 billion pension fund, George C. Weintz, investment counsel, said, "We're asking a lot of questions" about Batterymarch. "There have been some disappointments." He declined to mention specifics, saying Lockheed, a client since 1979, is just beginning to look at the firm.

"If Dean wasn't such an intellect, such a forward thinker, he'd be long gone," Mr. Weintz added.

"Everyone I knew there, most of us knew there, is gone except for Dean," he added.

Mr. LeBaron describes Batterymarch as a contrarian, quantitative manager that follows a disciplined approach. The firm buys stocks according to themes, now weighted to industrial and energy stocks. A typical portfolio contains about 120 stocks in different weightings, a number that hasn't changed through the years.

He attributes the recent years of underperformance to three factors: its emphasis on small-capitalization stocks, which as a market subset had done poorly; the sharp decline of cyclical companies, which now are benefiting from a lower dollar; and the incomplete application of a theme that it calls "corporate valuation."

Of the latter, Mr. LeBaron said Batterymarch began applying the theme in the past three years. "Our first application of corporate valuation emphasized hard assets — working capital, real estate, book value," he said. But he added that it became clear that corporations value themselves in other ways as well, such as by unused debt capacity, technological competence and market share dominance. These less tangible aspects were only more recently incorporated into the corporate valuation theme.

Jeffrey O. Drinan, vice president at New South Capital Management Inc., Memphis, Tenn., recalls dropping Batterymarch when he was running the Federal Express Corp. pension fund.

He blames Batterymarch's fast growth for contributing to its performance problems.

"It's a typical story; they had $500 million or $1 billion under management when they did well," he said.

The growing asset size forced Batterymarch, a contrarian, "to become the ultimate contrarian and buy all the stocks everyone was dumping," he added.

Federal Express had $30 million with Batterymarch for three years, including two underperforming years, and terminated the relationship in 1986.

"Had we thought (there were) prospects for him to do better, we would have kept him," Mr. Drinan added.

"I doubt Batterymarch would do as well in the future as it did in the past when it had significantly less money."

Some other clients and former clients, who declined to comment for attribution, also cited Batterymarch's size as contributing to its underperformance. Batterymarch recorded its best string of results in the 1970s as a firm with relatively far fewer assets. It didn't reach $1 billion in assets until 1978. In the 10 years since then, ended Dec. 31, it has beaten the S&P 500 by an average 20 basis points a year, less than its management fee.

Mr. LeBaron, however, dismissed suggestions that the firm's size hurt performance. He noted the firm had a string of good years with billions of dollars under management in the early 1980s, adding the firm lately also has been outperforming. "I don't see much difference to running $12 billion or $9 billion," he said.

Concern also was expressed that Mr. LeBaron has been devoting too much time to global ventures, including a new Brazil fund, even though most of Batterymarch's assets are invested domestically.

Indeed, the bulk of the money for foreign clients — most of which are institutions — is invested in the United States. In addition, last year Batterymarch began a mutual fund for Japanese clients; that fund also is invested in the United States.

Batterymarch is working with New Japan Securities Co. and Yamaichi Securities Co. to introduce its U.S. investment approach to Japanese investors.

The $1.3 billion pension fund of Southern California Edison Co., Rosemead, cut back Batterymarch's assignment late last year. Rick Yamamoto, supervisor-pension investments, said the fund wanted to diversify equity managers more, noting it reduced exposure with two other managers, while hiring five others.

He acknowledged the Batterymarch reduction "was a recognition that something is going on," but added, "we're willing to hang on. We have confidence in Dean."

Mr. Yamamoto said fund executives were concerned about the staff departures, but aren't sure of their contribution to performance.

Mr. LeBaron is vague about the contribution the departing executives made to the investment process. He said their departure is healthy, allowing the firm to generate new ideas. He declined to blame them for poor ideas.

At the $3 billion State Universities Retirement System of Illinois, Champaign, Kenneth L. Codlin, investment officer, said Batterymarch's performance "is not something I'm presently losing sleep over."

He attributed the underperformance to Batterymarch's emphasis on small-capitalization stocks, which have rebounded only recently after relatively poor performance since 1983.

"If we were going to come to a view that small-capitalization stocks aren't going to do that well, that would be of concern," Mr. Codlin said. "But we don't have that view."

He also doubted Batterymarch's size is a problem: "It seems to me they can handle significant amounts of money."

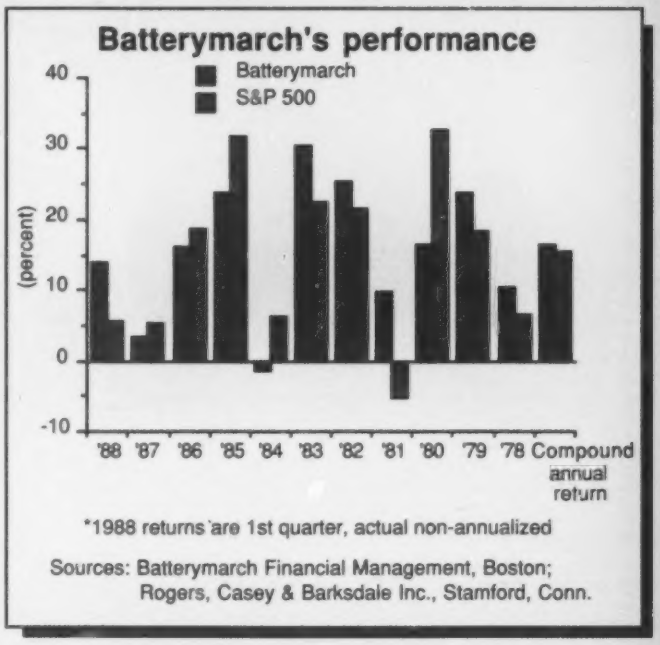
But he acknowledged Batterymarch is only for investors with long horizons and little need for liquidity.

Mr. LeBaron, unlike many other money managers, is open about his firm's record, a characteristic he said contributes to inspiring loyalty among clients.

But Mr. LeBaron said he might change the firm's presentation. He suggested scrapping the customary annual periods for measuring performance, preferring instead a "real" time, or constantly updated, basis.

In a recent conversation, he preferred to give performance under his real time scheme, a 20-month basis, ended March 31. During that time, Batterymarch returned 16%, compared with the S&P 500's 9%.

In addition, he said reporting of the firm's returns and style will become more complicated as Batterymarch moves toward customized portfolios, tailored for each client's objective and producing different outcomes, tied to different benchmarks. ■




*1988 returns are 1st quarter, actual non-annualized

Sources: Batterymarch Financial Management, Boston; Rogers, Casey & Barksdale Inc., Stamford, Conn.

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PENSIONS & May 16, 1988

Investment Age

# Finance boutiques thrive

By Marcia Parker

**In a two-part series starting in this issue's Financing section, *Pensions & Investment Age* takes a look at the highly competitive and fast-growing field of investment banking boutiques. More than 24 firms will be profiled, only a sampling of those serving the marketplace.**

The willingness of institutional investors to bankroll leveraged buy-outs and corporate financings and restructurings is propelling fundamental changes in American corporate finance.

Most noticeable is the rise of boutique investment banking firms, which are in the throes of raising $12 billion from investors.

As a result, the already competitive investment banking market has become even more cutthroat, with the investment banking boutiques — especially those formed by defectors from huge Wall Street firms — commercial banks and insurance companies pursuing clients and investors once the sole domain of the traditional Wall Street firms.

In addition, a few institutional investors are breaking new ground by getting investment bankers, such as the Blackstone Group, to surrender to them a piece of the lucrative advisory fees the firms' earn.

And some corporate pension fund executives, normally prime targets of money-raising marketing efforts, are being bypassed because investment bankers go directly to the chief executive officer, with whom they have prior business relationships.

All investment bankers, however, are turning increasingly to a relative newcomer to these corporate finance-type investments — the Japanese. Many of

*Continued on page 37*

# 2 investors halt buy-out

By Carol Wiley

CHICAGO — A pension fund and a financial services company used their shareholder muscle to block the proposed buy-out of G•R•I Corp. by a management-led investor group.

The $742 million Minneapolis Employees Retirement Fund, which owns about 7% of G•R•I's outstanding shares, and Fidelity International Ltd., London, which owns about 29% of the shares, rejected the $10-per-share or $225 million offer saying management had not given the board of directors sufficient time to evaluate the bid nor a fair price for the outstanding shares. (The stock closed at $9.62 May 11.)

Robert Logan, interim chairman of the G•R•I board, said because the two institutional investors control 36% of the stock, and Illinois law requires approval from 67% of shareholders before a buy-out can proceed, the board voted unanimously to reject the proposal.

Less than a week after the buy-out was defeated, the board removed David Rubin, G•R•I's chairman and chief executive officer and leader of the buy-out effort, from the executive committee of the direct-mail marketing firm. Mr. Logan said the board decided it was "inappropriate" for the leader of the management group to serve on the committee, because any other proposals would have to be screened by the committee before being presented to the board, and "we want the committee chaired by someone not involved. It is not a rebuke."

Mr. Rubin was replaced on the executive committee by board member Jerome H. Stone, retired chairman and chief executive officer of Stone Container Corp.

Mr. Rubin, other senior executives and affiliates of the Frontenac Co. venture capital firm, had submitted a proposal May 4 to buy the company.

In a statement, Mr. Rubin said board members rejected the offer because they did not have "adequate time to evaluate it" before the offer expired, and because more than 35% of the shareholders found the $10-per-share offer "not acceptable."

G•R•I board member John Chenoweth, executive director and chief investment officer of the Minneapolis pension fund, said he objected to the proposal and voted against it because of the time limitations

*Continued on page 38*

Wide World Photos

## Downtown L.A. fire puts LOR in the hot seat

Leland O'Brien Rubinstein Associates Inc. and other financial services firms faced a fiery challenge May 5, when four floors of Los Angeles' First Interstate Bank Tower were gutted by a blaze. But some foresight and a bit of luck let the firms handle business as usual after the calamity. Story on Page 4.

# Another bright idea?

## GE registers money management unit

By Marlene Givant

STAMFORD, Conn. — GE Investment Management Inc. has registered as an investment adviser with the Securities and Exchange Commission, furthering General Electric Co.'s drive to be a major player in financial services.

The new firm, whose parent has produced a string of winners in such businesses as financing and leasing, joins other in-house investment units that are competing head-to-head with money managers for pension fund accounts in an already crowded market.

Although top executives of the new firm declined to comment, sources confirmed GE Investment Management, Stamford, Conn., will tap the professional and support staff of GE Investment Corp., which runs $30 billion in company assets, including GE's $20.7 billion pension trust.

In addition to the two investment management units, GE Financial Services, with assets exceeding $50 billion, also owns 80% of Kidder, Peabody & Co., General Electric Credit Corp. and Employers Reinsurance Corp., a property and casualty reinsurer.

The GE pension fund is 98% internally managed by the subsidiary. Externally managed investments include a portion of the GE pension

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INSIDE

**PIPER first-quarter winners — P. 28**

## LATE NEWS

### Russell set to expand overseas

TACOMA, Wash. — Michael Phillips will become head of domestic and international consulting at Frank Russell Co. next month, signaling a greater emphasis on developing the company's global operations.

In addition, Don Hardy, now head of Frank Russell International's London office, will return to Tacoma this summer to become director of international development. Replacing Mr. Hardy as managing director-Europe is Alan Baker, who joined the London office in July 1987.

The moves also foreshadow a changing role for George Russell Jr., chairman and chief executive officer. By mid-1992, when he reaches age 60, Mr. Russell plans to step back from his day-to-day responsibilities to devote himself to conceptual issues concerning the firm.

### Managers served notice on fees

SAN FRANCISCO — Robert E. Shultz, vice president-pension asset management at RJR Nabisco Inc., last week warned money managers corporate pension fund executives are sharing fee information to see whether managers are charging some clients more and others less for the same services.

"We want the same fees for the same products and services," Mr. Shultz told money managers attending the Financial Analysts Federation meeting in San Francisco.

### Proxy procedures face scrutiny

WASHINGTON — Money managers are confident their proxy-voting procedures for pension fund clients would pass muster should they be the target of the Department of Labor's enforcement crackdown, announced May 11.

Top money managers said they were complying with proxy-voting standards clarified earlier this year by the department in a letter to Avon Products, but noted this is not universal among money managers.

In a recent survey of New York Society of Security Analysts members, however, only 39% of respondents said their firms had formal proxy voting policies, and 35% said their firms' policies are written.

### California to build on victories

SACRAMENTO, Calif. — The California Public Employees' Retirement System, buoyed by strong support from Gillette Co., USAir Group, Great Northern Nekoosa Corp. and Consolidated Freightways shareholders for the fund's non-binding anti-greenmail and anti-poison pill proxy resolutions, plans to contact the companies and urge them to take the next step, possibly eliminating the takeover defenses or putting them to a shareholder vote.

At Gillette's recent annual meeting, stockholders for the first time approved an anti-greenmail resolution calling on companies to stop paying premiums to raiders.

At USAir, the fund's anti-poison pill resolution was not approved because of abstentions; but among shareholders who voted, more favored the proposal than opposed it. At Great Northern and Consolidated Freightways, the same anti-poison pill resolutions were clearly defeated, but had significant support.

### Company creates pension post

STAMFORD, Conn. — T. Britton Harris has been named to the newly created post of director of pension and thrift investments at Combustion Engineering Inc., Stamford.

Mr. Harris worked for seven years at Texas Utilities Inc., Dallas, where he most recently was senior financial analyst and was involved in overseeing the company's $1.2 billion in employee benefit assets. His duties will be assumed by John M. Casey, principal financial analyst.

At Combustion Engineering, Mr. Harris will be responsible for the money managers, asset allocation and investment policy of the company's $498 million fund. The duties had been handled by an assistant treasurer.

## DEPARTMENTS


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Vol. 16, No. 10 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1988.

### International directory in works

The deadline has passed for submission of questionnaires for *Pensions & Investment Age*'s annual directory of the 50 largest international/global money managers.

The international directory will be published in the June 27 issue.

If you have any questions or have not returned your questionnaire, please contact Christine Philip, directory coordinator, *Pensions & Investment Age*, 740 N. Rush St., Chicago, Ill. 60611-2590.

You may call Ms. Philip at (312) 649-5217.

# Arbitrage halt splits investors

By Trudy Ring and Curtis Vosti

The decision by five major Wall Street brokerage houses to stop stock index arbitrage trades for their own accounts did not gain universal praise from institutional investors.

Some investors applauded the move, saying such trades increase market volatility and undermine investor confidence, particularly because of the possibility brokers could be "front running" — trading for their own accounts in anticipation of customer orders.

But others, including money managers that practice index arbitrage for clients, contended such trades actually decrease volatility, a position also taken by the Brady Commission.

The arbitrage managers also said the brokers' exit will add to opportunities to make profitable arbitrage trades for clients.

The five are Salomon Brothers Inc., Morgan Stanley & Co., PaineWebber Inc., Kidder, Peabody & Co. and Bear, Stearns & Co. Their moves leave no major Wall Street brokers involved in the practice; others, including Shearson Lehman Hutton Inc., Drexel Burnham Lambert Inc. and Goldman, Sachs & Co., made similar decisions several months ago.

"I think it's the right thing to do," said Edward T. Tokar Jr., vice president-investments at Allied-Signal Inc., Morristown, N.J. "As investors, we didn't see how (such trades) helped us in any way." He said he believes these trades do move the market and make trading more difficult for investors getting in ahead of or behind them.

"I think it's got to be a big positive," said William F. Quinn, president of AMR Investment Services, Fort Worth, Texas, which oversees American Airlines' pension fund. These trades add to market volatility and also lead to suspicions of front running, he said. "The fact that you can eliminate both of those aspects is probably good."

Other investors, however, contend index arbitrage — which takes advantage of price discrepancies between the stock and futures markets — alleviates volatility and balance the markets.

"Arbitrage is not in theory or in practice a destabilizing factor in the markets," said Tom Allen, president of Advanced Investment Management Inc., Pittsburgh, which does some arbitrage as well as portfolio insurance and straight equity management. "Less arbitrage will increase volatility, not reduce it."

Mr. Allen and other arbitrage practitioners said they now might have more opportunities to make profitable arbitrage trades, because there will be greater spreads between stocks and futures and be-

*Continued on page 34*

# Sharpe to run assets

## Firm focuses on allocation

By Mike Clowes

LOS ALTOS, Calif. — William F. Sharpe, the developer of the Capital Asset Pricing Model, on which the concepts of beta and alpha used in investment performance measurement are based, is entering the money management business with an asset allocation product.

Mr. Sharpe, who is also Timken Professor of Finance at Stanford University Graduate School of Business, will offer "integrated asset allocation," so-called because it integrates strategic, tactical and dynamic asset allocation.

The new investment management product is based on research Mr. Sharpe has carried out through Sharpe-Russell Research, a company started in early 1986 and funded by the Frank Russell Co. and eight of its clients, including General Motors Corp., IBM Corp., American Telephone & Telegraph Co., United Technologies Corp. and the Washington State Investment Board.

*Continued on page 34*

Lawrence G. Tint, left, will team up with William F. Sharpe.

# Citicorp boosts USF&G

By Joel Chernoff

USF&G Corp.'s $102.5 million purchase of Citicorp Investment Management will nearly triple the insurance company's presence in money management, but investment management still will be a small piece of its overall business.

The acquisition will increase the amount of assets under management to $27.5 billion from the $10 billion being managed by other USF&G subsidiaries. USF&G also owns pieces of money managers with more than $1 billion total under management.

But Baltimore-based USF&G's main business still is in the property/casualty area. Efforts to build its life insurance business and, more recently, fee-based financial services are an attempt to smooth earnings from the cyclical property/casualty area, which is headed into a downward swing.

While the purchase might lay the groundwork for the future, it "probably will not be enough to change USF&G's image," said Herb Goodfriend, first vice president at Prudential-Bache Securities Inc., New York.

Marvin Shulman, senior analyst at Moody's Investors Service Inc., New York, agreed the purchase "may give the company a basis of expanding in that area."

In addition, USF&G has been rumored to be a takeover target for about a year and the purchase could, in part, "ward off unwanted suitors," Mr. Goodfriend said.

All told, the company has invested $200 million into the financial services business during the past three years, and expects that amount to double during the next five years. The objective is to earn a minimum return of 15% by 1992, with a target of 20%, said James M. Raley Jr., president of USF&G Financial Services Corp.

Last year, financial services provided $40 million in revenue to USF&G, while losing an undisclosed amount. A small profit is

*Continued on page 36*

PIPER

# Convertibles score high in quarter

**By Curtis Vosti**

Connecticut Mutual Life, Hartford, posted the top return of a pooled fixed-income fund in the quarterly Pensions & Investments' Performance Evaluation Reports.

PIPER measures the performance of 299 commingled fixed-income funds of banks and insurance companies.

For 1988's first quarter, Connecticut Mutual's CM Dimension fund returned 13.2%. For the year ended March 31, the fund returned 7.5%, good enough to place in the top 10%.

The PIPER median fund returned 3.6% for the quarter and 4.8% for the year; the Shearson Lehman Government/Corporate bond index returned 3.6% and 4.4% for the respective periods.

The Connecticut Mutual fund is managed by David Solomon Asset Management, New York, and features convertible and high-yield securities, according to Brian Walters, vice president for Connecticut Mutual Asset Advisors, Weathersfield, Conn., the insurer's asset management division.

"With such a specialized fund, there are very few players good at it and Solomon's the best," Mr. Walters said.

He said in the first quarter, the fund moved more toward convertibles than debentures even though convertibles "took a hit" at the end of 1987.

At the quarter, the fund's chief asset mix was 30% in debentures, 30% in convertibles and 18% in convertible preferreds.

"The whole idea was lower volatility, significantly less volatility than an equity fund," he said.

Los Angeles-based Trust Co. of the West placed two funds in the top five for the first quarter: a convertible value bond that finished second with a return of 10.3%; and a "convertible strategy" that finished fifth at 7.9%.

**Fixed-income funds**
**(periods ended March 31, 1988)**

| | 1st qtr. | 1 yr. | 3 yr. | 5 yr. | 10 yr. |
|---|---|---|---|---|---|
| Highest return | 13.2% | 10.3% | 20 % | 16 % | 13.4% |
| First quartile | 4 | 5.8 | 13.8 | 12.3 | 11 |
| Median | 3.6 | 4.8 | 12.6 | 11.6 | 10.2 |
| Third quartile | 3.1 | 3.6 | 11.2 | 10.8 | 9.7 |
| Lowest return | 1.2 | −4 | 2.5 | 8.2 | 6.3 |
| Shearson Lehman | 3.6 | 4.4 | 13.3 | 12.3 | 10.7 |

The strong quarterly performance offset a slow trailing 12 months for TCW's top funds.

Both funds finished at the bottom of the universe for the year ended March 31: the convertible value fund at −2.99% and the convertible strategy barely ahead of it at −2.97%.

The reason: "Brilliant management," Thomas Larkin, managing director said, only half-joking.

"They did what they were suppose to do," Mr. Larkin said of the two funds. "Convertibles were very cheap, we're well positioned for a recovery."

The funds use a true value-type strategy, Mr. Larkin said, and also recently developed an orientation toward cyclical companies, he said, which did very well in 1988's first quarter.

The firm's convertible strategy, he said uses sector rotations, overweighted in cyclicals.

Beverly Trust Co., a subsidiary of Beverly Bancorporation, Chicago, finished third for the quarter with a return of 9.41%. For the year ended March 31, the fund posted a 7.73% return, placing it firmly in the top decile.

Ron Stajkowski, Beverly Trust's president, said all holdings are corporate securities. He said the firm acts on a generated interest rate forecast, but added, "I'm really not sure where interest rates are going."

"Our philosophy is to buy a lot of high-coupon corporate securities," Mr. Stajkowski said. The majority of them have calls in five to seven years. He said the bank looks for short calls with high coupons.

New York Life's convertible securities fund finished fourth for the quarter with an 8.8% return from its convertible securities fund.

For the 12 months, the top performer was Wilmington Trust Co.'s bond fund with a 10.3% return, although it fell to the ninth decile in 1988's first quarter, with a 2.64% return.

The top showing pleased Richard Hobman, vice president for fixed income.

The fund uses quantitative analysis to time the swings in the five-year performance of Treasury notes, Mr. Hobman said, stressing the bank doesn't forecast interest rates.

"We're either 100% in the note or 100% out of the market in cash equivalents," he said.

He said the timing correctly caught two major downswings in the year: the firm was out of the market at the end of March and the end of August. The fund then purchased notes just after the Oct. 19 stock market crash and, most recently, has been out of the market since March 8.

The firm's quantitative system

*Continued on page 32*

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PIPER

# Stressing value pays

## Strategy takes top honors in short term

By Trudy Ring

Value-oriented pooled equity funds did well in the quarter and longer periods ended March 31, but a growth-oriented fund took the top long-term rankings in Pensions & Investments' Performance Evaluation Report.

PIPER ranks 322 pooled stock funds offered by banks and insurance companies. The median fund beat the Standard & Poor's 500 stock index in the quarter and year ended March 31, but not in longer periods.

The median fund returned 6.2% for the quarter, compared with the S&P 500's return of 5.7%. For the year, the median was −7.7% and the index −8.4%.

For the three years ended March 31, the median fund's compound annual return was 15.8%, while the S&P 500's was 16.8%. For the five years, the median was 13.5% and the S&P 15.6%; for the 10 years, the median was 15.8% and the index 16.6%.

First Fidelity Bank, Newark, N.J., topped the quarter with 19.9% and the year with 17.4%. It was fifth for the three-year period with 23.1%, third for five years with 20.3% and third for 10 years with 20.8%.

First Fidelity uses a value-oriented strategy to select small-capitalization stocks for its $50 million fund. The bank looks at six balance sheet ratios and six qualitative factors, the equivalent of what a corporation might do to select an acquisition candidate, said Gerald J. Reilly, group vice president.

"We had a fair amount of luck in identifying companies that were bid for," he said. Some were **George Banta Co. Inc., Koppers Co. Inc., National Intergroup Inc.** and **CertainTeed Corp.**

Dallas-based First Republic-Bank's diversified equity fund was third for the quarter with 17.4%, and in the top 10% for every period. The fund's return for one year was 0.6%; three years, 22.5%; five years, when it ranked second among all funds, 20.6%; and 10 years, 18.9%.

The $113 million fund's managers divide the S&P 500 stocks into more than 50 industry categories and usually buy the stock with the lowest price-earnings ratio in each, said Chris Najork, senior vice president of First Republic-Bank Asset Management Co. Texas, the bank's investment management subsidiary.

In the quarter, "75% of the stocks we had in the portfolio outperformed the market," he said. These included **Brunswick Corp., Lockheed Corp.** and **Brown-Forman Inc.**

First National Bank of Chicago was second for the year with 14.3%, and in the top 20% for the three- and five-year periods with 19.3% and 16.6% respectively. It was in the top 30% for the quarter, still beating the index with 8.5%, and just below the index for 10 years, with 16.5%. The bank overhauled its investment strategy eight years ago.

The equity fund is value-oriented, using a proprietary model that estimates companies' earning power and ability to generate projects for future growth, said Jeffrey Diermeier, managing director-common stock division at First Chicago Investment Advisors, which manages the fund. It also will go into cash, or sell stock index futures to create a cash equivalent position, when the stock market is high. The fund was hedged to create a 50% position in cash equivalents going into the Oct. 19 crash, and was a heavy buyer of stocks and futures when they became cheap Oct. 19 and 20, Mr. Diermeier said.

Hedging helped the fund beat the market in the 12-month period, he said. The hedged position, although down to 20% Jan. 1, held back performance in the first quarter's rising market, he added. The $460 million fund's holdings include **MCI Communications Corp., Deere & Co., SmithKline Beckman Corp.** and **Citicorp.**

Funds at State Bank and Trust Co., Defiance, Ohio, and Bank One Richmond, Richmond, Ind., run by the same manager, did well in the quarter, one-year and three-year periods; they were too new for the others.

The State Bank fund was second in the quarter with 18.2%; Bank One Richmond was fifth with 15.5%. For the year, both slipped slightly but remained in the top 10%, Bank One Richmond with 1.3% and State Bank with a −0.5%. State Bank was second and Bank One Richmond third in the three-year period with returns of 28.2% and 28% respectively.

James Investment Research Inc., Alpha, Ohio, manages both funds. The firm uses computer modeling and personal research to find stocks that are outperforming their peers, are neglected by Wall Street and institutions and have strong fundamentals, said Frank James, president.

Holdings in the $7 million State Bank fund in the past quarter included **Calmat Co., Crane Co., Lukens Inc., J.P. Stevens & Co.** and **NCR Corp.** Stocks in the $8 million Bank One Richmond fund included **A.G. Edwards Inc.** and **The Toro Co.** The funds' holdings and returns vary because of the timing of their cash flows and the stock buys available then, Mr. James said.

United Bank of Denver was third for the year with a 10.6% re-

*Continued on page 32*

**Equity funds**
**(periods ended March 31, 1988)**

| | 1st qtr. | 1 yr. | 3 yr. | 5 yr. | 10 yr. |
|---|---|---|---|---|---|
| Highest return | 19.9% | 17.4% | 29.7% | 27 % | 23.3% |
| First quartile | 8.6 | −4.4 | 17.5 | 15.8 | 17.2 |
| Median | 6.2 | −7.7 | 15.8 | 13.5 | 15.8 |
| Third quartile | 3.8 | −10.6 | 13.4 | 11.7 | 14.5 |
| Lowest return | −2 | −31.2 | 4.2 | 5.4 | 9 |
| S&P 500 | 5.7 | −8.4 | 16.8 | 15.6 | 16.6 |

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PIPER

## Top quartile commingled fixed-income funds

### 3-month returns

| | % |
|---|---|
| Connecticut Mutual (CM dim.) | 13.2 |
| Trust Co. of the West (Con. value) | 10.3 |
| Beverly Bank, Ill. | 9.4 |
| New York Life (Convert. sec.) | 8.8 |
| Trust Co. of the West (Con. strat.) | 7.9 |
| Sunburst Bank, Miss. | 6.7 |
| New York Life (Lg. cap. convert.) | 6.4 |
| Trust Co. of the West (High yield) | 6.4 |
| Wellington Trust (High yield) | 6.3 |
| Second Nat'l Bank (Emp.), Ohio | 6.0 |
| Delaware Trust | 5.3 |
| General American (SA 9), Mo. | 5.3 |
| Norstar Trust, N.Y. | 5.3 |
| Pacific Financial (Hyr.) | 5.3 |
| Capital Trust, Ore. | 5.2 |
| The New England, Mass. | 5.0 |
| Wellington Trust (Mtg.), Mass. | 5.0 |
| First Variable Life (High), Ark. | 4.9 |
| Connecticut Nat'l Bank | 4.8 |
| Hawaiian Trust | 4.8 |
| First Trust, Colo. | 4.7 |
| Frost Nat'l, Texas | 4.7 |
| Northern Trust, Ill. | 4.7 |
| First Security Nat'l (F), Ky. | 4.6 |
| Wellington Trust (Long term) | 4.6 |
| First Variable Life, Ark. | 4.6 |
| Phoenix Mutual, Conn. | 4.6 |
| First of Kenosha (CT4002), Wis. | 4.5 |
| Mercantile Bank, Mo. | 4.5 |
| Centerre Trust, Mo. | 4.5 |
| Transamerica Life (SA T-2), Calif. | 4.5 |
| First Kentucky Trust | 4.4 |
| Summit Trust, N.J. | 4.4 |
| IAA Trust (B), Ill. | 4.4 |
| Metropolitan Life (SA 41), N.Y. | 4.4 |
| Fidelity Bank, Pa. | 4.3 |
| SeaFirst Bank, Wash. | 4.2 |
| First Trust, Minn. | 4.2 |
| First RepublicBank (Long term) | 4.2 |
| Connecticut Nat'l Bank (Inter.) | 4.2 |
| First of Chicago (Dollar) | 4.2 |
| Nat'l City Cleveland | 4.2 |
| Riggs of Washington | 4.2 |
| Midlantic Nat'l, N.J. | 4.2 |
| EF Hutton (2), Del. | 4.2 |
| Associated Manitowoc (High), Wis. | 4.2 |
| HT Investors (A), R.I. | 4.1 |
| Bankers Trust (A), N.Y. | 4.1 |
| Bank of New England, Mass. | 4.1 |
| First Nat'l Mercantile (B), Mo. | 4.1 |
| First of Minneapolis | 4.1 |
| CIGNA Corp. (Inter.), Conn. | 4.1 |
| Mutual of New York (Public) | 4.1 |
| First Bank Milwaukee | 4.1 |
| Colonial American Nat'l, Va. | 4.1 |
| First Interstate of Arizona | 4.1 |
| Confederation Life (Amer.), Ontario | 4.1 |
| Chase Investors (CMB index), N.Y. | 4.0 |
| First of Chicago | 4.0 |
| Chase Manhattan (Sec. mtg.), N.Y. | 4.0 |
| Harris Trust, Ill. | 4.0 |
| NCNB Nat'l Bank, N.C. | 4.0 |
| First Wachovia, N.C. | 4.0 |
| Principal Mutual Life, Iowa | 4.0 |
| Mellon Bank, Pa. | 4.0 |
| Boatmen's FNB Kansas City, Mo. | 4.0 |
| First Wisconsin Trust | 4.0 |
| Sun Bank, Fla. | 4.0 |
| Sentry Life (SA D), Wis. | 4.0 |
| Gary Wheaton Bank, Ill. | 4.0 |
| Chase Manhattan (Long term), N.Y. | 4.0 |
| **Shearson Lehman G/C Index** | **3.6** |

### 1-year returns

| | % |
|---|---|
| Wilmington Trust, Del. | 10.3 |
| Capital Trust (GIC), Ore. | 10.0 |
| Trustmark Nat'l, Miss. | 9.9 |
| Citicorp (Bondshift), N.Y. | 9.0 |
| Hawaiian Trust (Defensive) | 8.8 |
| Norstar Trust, N.Y. | 8.7 |
| Sovran-Weaver C. Barksdale | 8.7 |
| Capital Trust, Ore. | 8.7 |
| Wheeling Dollar Bank, W. Va. | 8.4 |
| Banc One Asset (Invt.), Ohio | 8.3 |
| Texas Commerce (Low vol.) | 8.1 |
| First Interstate of Wisconsin | 8.1 |
| First Union Bank (1), N.C. | 8.0 |
| Equitable Life (5), N.Y. | 7.8 |
| First Alabama, Mobile | 7.8 |
| Harris Trust (Gain), Ill. | 7.8 |
| Beverly Bank, Ill. | 7.7 |
| AmSouth (Ltd. mat.), Ala. | 7.6 |
| Chase Manhattan (Short-inter.) | 7.6 |
| Connecticut Mutual (CM dim.) | 7.5 |
| Mid-State Bancorp, Pa. | 7.4 |
| General American (SA 9), Mo. | 7.4 |
| Cullen Bank, Texas | 7.3 |
| Mercantile Safe (Inter.), Md. | 7.2 |
| Exchange Nat'l Bank, Ill. | 7.2 |
| Columbus Bank & Trust, Ga. | 7.2 |
| Dauphin Deposit (Short), Pa. | 7.1 |
| Valley Fidelity, Texas | 7.1 |
| Sovran Bank (Inst.), Va. | 6.9 |
| Mercantile Safe, Md. | 6.9 |
| Transamerica Life (SA T-2), Calif. | 6.8 |
| Key Trust, N.Y. | 6.8 |
| Prudential (VCA 8), N.J. | 6.8 |
| Mich. Nat'l of Grand Rapids | 6.6 |
| AmeriTrust (Reserve), Ohio | 6.6 |
| Central Fidelity (Short), Va. | 6.6 |
| First Union Bank, N.C. | 6.6 |
| Manufacturers Detroit (Inter. H) | 6.6 |
| First of Minneapolis | 6.5 |
| Crestar Bank (Short) | 6.5 |
| Colonial American Nat'l, Va. | 6.4 |
| Pacific Mutual, Calif. | 6.4 |
| First RepublicBank Asset (Low vol.) | 6.4 |
| Midlantic Nat'l, N.J. | 6.4 |
| First of Bartlesville, Okla. | 6.4 |
| Society Nat'l, Ohio | 6.3 |
| Central Bank Monroe, La. | 6.3 |
| First of Neenah (Mtg.), Wis. | 6.3 |
| First of Chicago | 6.3 |
| Valley Nat'l (II), Ariz. | 6.3 |
| Northern Trust, Ill. | 6.3 |
| New York Life (4) | 6.2 |
| First of Kenosha (CT4002), Wis. | 6.2 |
| Continental Bancorp, Pa. | 6.2 |
| First Trust Co., Minn. | 6.1 |
| First Wisconsin Trust (Pass. inter.) | 6.1 |
| Associated Kellogg, Wis. | 6.1 |
| Travelers (SA D), Conn. | 6.0 |
| Harris Trust, Ill. | 6.0 |
| First Kentucky Trust | 5.9 |
| First City Nat'l Houston (Inst. C-1) | 5.9 |
| Lake Shore Nat'l, Ill. | 5.9 |
| Pacific Financial (Hyr.), Calif. | 5.9 |
| Southtrust Bank, Ala. | 5.8 |
| Continental Illinois (Inter.) | 5.8 |
| First of Neenah (Long), Wis. | 5.8 |
| First of Maryland | 5.8 |
| Summit Trust Co., N.J. | 5.8 |
| Principal Mutual Life, Iowa | 5.8 |
| Summit Bank, Ind. | 5.8 |
| **Shearson Lehman G/C Index** | **4.4** |

### 5-year returns

| | % |
|---|---|
| Delaware Trust | 16.0 |
| United of Denver | 15.2 |
| IAA Trust (B), Ill. | 14.7 |
| Beverly Bank, Ill. | 14.6 |
| Equitable Life (5), N.Y. | 14.4 |
| Connecticut Nat'l Bank | 14.2 |
| Centerre Trust, Mo. | 14.0 |
| Trust Services of America, Calif. | 13.9 |
| Sunburst Bank, Miss. | 13.9 |
| Central Fidelity, Va. | 13.7 |
| First Interstate of Arizona | 13.7 |
| First Variable Life (H.Q.), Ark. | 13.6 |
| First Variable Life, Ark. | 13.5 |
| Pacific Mutual, Calif. | 13.4 |
| Morgan Guaranty, NY. | 13.4 |
| Colonial American Nat'l, Va. | 13.3 |
| Travelers (SA P), Conn. | 13.3 |
| General American (SA 9), Mo. | 13.3 |
| First Alabama, Mobile | 13.2 |
| First Kentucky Trust | 13.2 |
| First of Chicago | 13.2 |
| Colorado Nat'l Bank | 13.2 |
| First of Chicago (Dollar) | 13.2 |
| John Hancock, Mass. | 13.1 |
| Life of Virginia | 13.0 |


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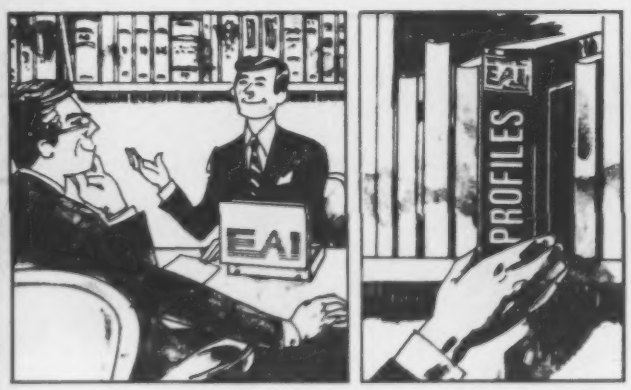


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| | |
|---|---|
| American Security, D.C. | 12.9 |
| Northern Trust, Ill. | 12.9 |
| First Interstate of California | 12.8 |
| First of Omaha (C), Neb. | 12.8 |
| Sovran Bank, Va. | 12.8 |
| Norstar Trust, N.Y. | 12.8 |
| Citicorp, N.Y. | 12.8 |
| Harris Trust, Ill. | 12.7 |
| Philadelphia Nat'l | 12.7 |
| General American (SA 8), Mo. | 12.6 |
| Second Nat'l Bank (Emp.),Ohio | 12.6 |
| Society Nat'l, Ohio | 12.6 |
| First Wisconsin Asset Mgmt. | 12.6 |
| Key Trust Co., N.Y. | 12.5 |
| Exchange Nat'l Bank, Ill. | 12.5 |
| Nat'l Bank of Commerce, Neb. | 12.4 |
| Liberty Nat'l, Ky. | 12.4 |
| Hamilton Bank, Pa. | 12.4 |
| Manufacturers Detroit | 12.4 |
| Connecticut Nat'l Bank (Inter.) | 12.4 |
| CIGNA Corp. (Inter.), Conn. | 12.4 |
| Fidelity Bank, Pa. | 12.4 |
| Mutual of New York (Public) | 12.3 |
| Mellon Bank, Pa. | 12.3 |
| California First Bank | 12.3 |
| Wellington Trust (Inter.), Mass. | 12.3 |
| Trustmark Nat'l, Miss. | 12.3 |
| CIGNA Corp. (Active), Conn. | 12.3 |
| **Shearson Lehman G/C Index** | **12.3** |

### 10-year returns

| | % |
|---|---|
| United of Denver | 13.4 |
| Beverly Bank, Ill. | 13.0 |
| Sovran Bank (Inst.), Va. | 13.0 |
| Pacific Mutual, Calif. | 12.4 |
| Fidelity Bank, Pa. | 12.4 |
| Centerre Trust, Mo. | 12.4 |
| SeaFirst Bank, Wash. | 12.3 |
| American Security, D.C. | 12.3 |
| Texas Commerce (Active) | 12.2 |
| First Kentucky Trust | 12.0 |
| Life of Virginia | 11.8 |
| Hibernia Nat'l, La. | 11.8 |
| First Interstate of California | 11.7 |
| Morgan Guaranty, N.Y. | 11.7 |
| First Interstate of Arizona | 11.6 |
| First Wisconsin Asset | 11.6 |
| Central Fidelity, Va. | 11.6 |
| First Jersey Nat'l, N.J. | 11.6 |
| Sovran-Weaver C. Barksdale | 11.5 |
| Connecticut Nat'l Bank | 11.5 |
| Boatmen's Nat'l, Mo. | 11.5 |
| Manufacturers Hanover (Gr. tr.) | 11.5 |
| Northern Trust (Inter.), Ill. | 11.4 |
| Manufacturers Detroit | 11.4 |
| Bank of New England, Mass. | 11.4 |
| Bankers Trust (B), N.Y. | 11.4 |
| Boatmen's FNB Kansas City, Mo. | 11.3 |
| Cullen Bank, Texas | 11.3 |
| U.S. Trust, N.Y. | 11.3 |
| Bankers Trust (A), N.Y. | 11.3 |
| Mid-State Bancorp, Pa. | 11.2 |
| Merchants Nat'l, Pa. | 11.2 |
| John Hancock, Mass. | 11.2 |
| IAA Trust (B), Ill. | 11.2 |
| AmeriTrust (Reserve), Ohio | 11.2 |
| Mercantile Bank, Mo. | 11.2 |
| American Nat'l Bank, Tenn. | 11.2 |
| Second Nat'l Bank (Emp.), Ohio | 11.1 |
| First Bank Milwaukee | 11.0 |
| Society Nat'l, Ohio | 11.0 |
| Trustcorp Bank, Ohio | 11.0 |
| First of Chicago | 11.0 |
| CIGNA Corp. (Active), Conn. | 11.0 |
| **Shearson Lehman G/C Index** | **10.7** |

## Top quartile commingled equity funds

### 3-month returns

| | % |
|---|---|
| First Fidelity Bank (Disc.), N.J. | 19.9 |
| State Bank (Retire. C), Ohio | 18.2 |
| First RepublicBank, Texas | 17.4 |
| American Nat'l, Minn. | 15.6 |
| Bank One, Richmond (C), Ind. | 15.5 |
| First Interstate of Oregon | 14.2 |
| Sentry Life (SA E), Wis. | 13.6 |
| MTrust (Value), Texas | 13.5 |
| Centerre Trust, Mo. | 13.5 |
| Nat'l Bank of Commerce, Tenn. | 13.5 |
| Pioneer Bank, Ill. | 13.5 |
| Harris Trust (Low p/e), Ill. | 13.1 |
| Meridian Trust, Pa. | 13.1 |
| Guardian Insurance (VA 1), N.Y. | 13.0 |
| EF Hutton (2), Del. | 12.9 |
| Home Life, N.Y. | 12.8 |
| Bank of New England (Valuepath) | 12.6 |
| Prudential (PRIFORM-low p/e) | 12.5 |
| Wilmington Trust (Growth), Del. | 12.5 |
| Chemical Bank (2), N.Y. | 12.1 |
| Stock Yards Bank (Trust), Ky. | 12.1 |
| New York Life (SA 1) | 12.1 |
| Bank One, Indianapolis | 11.8 |
| Mercantile Nat'l, Ind. | 11.8 |

## Top fixed funds by size

### 1-year returns
### Over $100 million

| | % |
|---|---|
| Capital Trust (GIC), Ore. | 9.9 |
| Trustmark Nat'l, Miss. | 9.9 |
| Equitable Life (No. 5), N.Y. | 7.8 |
| Chase Manhattan (Short-inter.) | 7.6 |
| Sovran Bank (Inst.), Va. | 6.9 |
| Prudential (VCA 8) | 6.8 |
| First Union Bank, N.C. | 6.6 |
| Pacific Mutual, Calif. | 6.4 |
| First of Chicago | 6.3 |
| New York Life (SA 4) | 2.2 |

### $50 million to $100 million

| | % |
|---|---|
| First Interstate of Wis. (Inc.) | 20.5 |
| Citicorp (Bondshift), N.Y. | 9.0 |
| Hawaiian Trust (Defensive) | 8.6 |
| Norstar Trust, N.Y. | 8.7 |
| Banc One Asset, Ohio | 8.3 |
| Texas Commerce (Low vol.) | 8.1 |
| First Union Bank (1), N.C. | 7.9 |
| AmSouth (Ltd. mat.), Ala. | 7.6 |
| Connecticut Mutual (CM dim.) | 7.5 |
| Mercantile Safe (Inter.), Md. | 7.2 |
| Exchange Nat'l Bank, Ill. | 7.2 |

### $10 million to $50 million

| | % |
|---|---|
| Wilmington Trust, Del. | 10.3 |
| First Alabama, Mobile | 7.8 |
| Cullen Bank, Texas | 7.3 |
| Columbus Bank, Ga. | 7.2 |
| Dauphin Deposit (Short), Pa. | 7.1 |
| Valley Fidelity, Tenn. | 7.1 |
| Mercantile Safe,Md. | 6.9 |
| Key Trust, N.Y. | 6.8 |
| Mich. Nat'l/Grand Rapids | 6.6 |
| Crestar Bank (Short) | 6.5 |

### Under $10 million

| | % |
|---|---|
| Sovran-Weaver C. Barksdale | 8.7 |
| Capital Trust, Ore. | 8.7 |
| Beverly Bank, Ill. | 7.7 |
| General American (SA 9), Mo. | 7.4 |
| Central Fidelity (Short), Va. | 6.6 |
| Colonial American Nat'l, Va. | 6.4 |
| First in Bartlesville, Okla. | 6.4 |
| First of Neenah (Mtg.), Wis. | 6.3 |
| Valley Nat'l (II), Ariz. | 6.3 |
| First of Kenosha (CT4002), Wis. | 6.2 |

### 10-year returns
### Over $100 million

| | % |
|---|---|
| Sovran Bank (Inst.), Va. | 13.0 |
| Pacific Mutual, Calif. | 12.4 |
| Centerre Trust, Mo. | 12.4 |
| American Security, D.C. | 12.3 |
| Texas Commerce (Active) | 12.2 |
| Boatmen's Nat'l, Mo. | 11.5 |
| Northern Trust (Inter.), Ill. | 11.4 |
| John Hancock, Mass. | 11.2 |
| Mercantile Bank, Mo. | 11.2 |
| First of Chicago, Ill. | 11.0 |
| First Wachovia, N.C. | 11.0 |
| CIGNA Corp. (Active), Conn. | 11.0 |

### $50 million to $100 million

| | % |
|---|---|
| First Kentucky Trust (Ret.) | 12.0 |
| Life of Virginia | 11.9 |
| Hibernia Nat'l, La. | 11.8 |
| First Jersey Nat'l | 11.6 |
| Manufacturers Detroit | 11.4 |
| Bankers Trust (B), N.Y. | 11.4 |
| Bankers Trust (A), N.Y. | 11.3 |
| AmeriTrust (Reserve), Ohio | 11.2 |
| Citicorp, N.Y. | 10.9 |
| Mellon Bank, Pa. | 10.8 |

### $10 million to $50 million

| | % |
|---|---|
| United of Denver | 13.4 |
| Fidelity Bank, Pa. | 12.4 |
| First Interstate/California | 11.7 |
| First Interstate/Arizona | 11.6 |
| First Wisconsin Asset | 11.6 |
| Cullen Bank, Texas | 11.3 |
| Merchants Nat'l, Pa. | 11.2 |
| IAA Trust (B), Ill. | 11.2 |
| American Nat'l Bank, Tenn. | 11.2 |
| First Bank of Milwaukee | 11.0 |
| Society Nat'l, Ohio | 11.0 |
| Trustcorp Bank, Ohio | 11.0 |

### Under $10 million

| | % |
|---|---|
| Beverly Bank, Ill. | 13.0 |
| Central Fidelity, Va. | 11.6 |
| Sovran-Weaver C. Barksdale | 11.5 |
| Connecticut Nat'l Bank | 11.5 |
| Second Nat'l Bank (Emp.) | 11.1 |
| Colonial American Nat'l, Va. | 11.0 |
| Oregon Bank | 10.8 |
| First Nat'l Lincoln, Neb. | 10.5 |
| Associated Manitowoc (High) | 10.2 |
| First of Bartlesville, Okla. | 10.0 |
| Valley Nat'l (II), Ariz. | 10.0 |
| Greeley Nat'l, Colo. | 10.0 |
| American Nat'l Bank, Ind. | 10.0 |

| | |
|---|---|
| Provident Nat'l, Pa. | 11.6 |
| First of America (Con. value) | 11.5 |
| U.S. Nat'l of Galveston, Texas | 11.5 |
| Trust Co. of West (Strategy) | 11.3 |
| EF Hutton (6), Del. | 11.0 |
| Oregon Bank | 10.9 |
| Gary Wheaton Bank (Hedged), Ill. | 10.8 |
| AmSouth, Ala. | 10.8 |
| Capital Trust (I), Ore. | 10.7 |
| Norstar Trust, N.Y. | 10.4 |
| Cullen Bank, Texas | 10.3 |
| Jefferson Trust (CT growth), Ill. | 10.3 |
| Fidelity Mgmt. (Inc.), Mass. | 10.3 |
| Colorado Nat'l Bank | 10.2 |
| Harris Trust, Ill. | 10.1 |
| Principal Mutual Life, Iowa | 10.1 |
| Continental Illinois | 10.0 |
| Confederation Life, Ontario | 10.0 |
| U.S. Nat'l of Oregon (Qualivest) | 10.0 |
| United of Denver | 10.0 |
| Merchants Nat'l, Pa. | 10.0 |
| AmeriTrust (Divers.), Ohio | 9.9 |
| First Fidelity Bank, N.J. | 9.7 |
| American Security, D.C. | 9.6 |
| First American of Georgia | 9.6 |
| Travelers (SA dr.), Conn. | 9.5 |
| Banc One Asset (Corp.), Ohio | 9.4 |
| Commerce Bank St. Louis | 9.4 |
| Employers Life of Wausau (SA 1), | 9.4 |
| First Jersey Nat'l, N.J. | 9.3 |
| Wellington Trust (Divers.), Mass. | 9.3 |
| First RepublicBank (Inc.), Texas | 9.3 |
| First N. H. Investment (Emp. A) | 9.2 |
| Citytrust (E1), Conn. | 9.2 |
| Wellington Trust, Mass. | 9.1 |
| Massachusetts Mutual | 9.0 |
| Crown Life (U.S. grp.) Ontario | 8.9 |
| Prudential (PRIDEX-W-5000), N.J. | 8.9 |
| LaSalle Nat'l (Intrinsic), Ill. | 8.9 |
| First of Minneapolis | 8.8 |
| South Carolina Nat'l | 8.8 |
| Chicago Title & Trust | 8.8 |
| First of Maryland | 8.8 |
| C & S Trust Florida | 8.7 |
| **Standard & Poor's** | **5.7** |

### 1-year returns

| | % |
|---|---|
| First Fidelity Bank (Disc), N.J. | 17.4 |
| First of Chicago | 14.3 |
| United of Denver | 10.6 |
| First of Maryland | 5.4 |
| Pioneer Bank, Ill. | 3.8 |
| Crown Life (U.S. grp.), Ontario | 3.7 |
| EF Hutton (2), Del. | 2.9 |
| Security Nat'l Bank, W. Va. | 2.7 |
| Gary Wheaton Bank (Hedged), Ill. | 2.5 |
| Calcasieu Marine Nat'l (E), La. | 2.4 |
| Sovran Bank (Inst.), Va. | 1.7 |
| Phoenix Mutual, Conn. | 1.6 |
| Confederation Life, Ontario | 1.5 |
| Bank One, Richmond (C), Ind. | 1.2 |
| Jefferson Trust (CT growth), Ill. | 1.1 |
| Nat'l Bank of Commerce, Tenn. | 0.8 |
| First RepublicBank, Texas | 0.6 |
| Central Bank Monroe, La. | 0.5 |
| First Fidelity Bank, N.J. | 0.4 |
| Capital Trust (I), Ore. | 0.1 |
| C&S Bank & Trust, Fla. | −0.2 |
| State Bank (Retire. C), Ohio | −0.5 |
| First Alabama Bank (I) | −0.6 |
| U.S. Nat'l of Oregon (Qualivest) | −0.9 |
| Norstar Trust, N.Y. | −1.0 |
| Colorado Nat'l Bank | −1.0 |
| Liberty Nat'l, Ky. | −1.1 |
| Wheeling Dollar Bank, W. Va. | −1.2 |
| Bessemer Trust, N.Y. | −1.3 |
| First of Omaha (D), Neb. | −1.3 |
| Bank One, Indianapolis | −1.3 |
| Capital Trust (II), Ore. | −1.5 |
| Shawmut Bank, Mass. | −1.6 |
| U.S. Nat'l of Galveston, Texas | −1.6 |
| Sun Bank, Fla. | −1.6 |
| South Carolina Nat'l | −1.8 |
| American Nat'l, Minn. | −1.9 |
| Connecticut Mutal (CM select) | −1.9 |
| Dominion Trust (Corp.), Va. | −1.9 |
| Beverly Bank, Ill. | −2.0 |
| First Interstate of Oregon | −2.1 |
| First Interstate of Oklahoma | −2.2 |

| | |
|---|---|
| First Illinois (Personal) | −2.2 |
| First Illinois (Corp.) | −2.2 |
| First Jersey Nat'l, N.J. | −2.3 |
| AmSouth, Ala. | −2.3 |
| First American of Georgia | −2.4 |
| Associated Manitowoc, Wis. | −2.4 |
| Citizens Heritage (Cliran), Ohio | −2.8 |
| First Wisconsin Trust (Inc.) | −2.8 |
| Key Trust, N. Y. | −2.8 |
| First Interstate of Texas | −3.0 |
| First N.H. Investment (Emp. A) | −3.1 |
| Meridian Trust, Pa. | −3.1 |
| Massachusetts Mutual | −3.3 |
| Citizens Fidelity (E), Ky. | −3.3 |
| Cullen Bank, Texas | −3.5 |
| First of Kenosha (CT4001), Wis. | −3.7 |
| Citicorp (Stockshift 200), N.Y. | −3.7 |
| Trust Co. of Georgia | −3.8 |
| Valley Nat'l (I), Ariz. | −3.8 |
| Associated Kellogg, Wis. | −3.9 |
| Mutual of New York (Inc.) | −3.9 |
| Citicorp (Stockshift 100), N.Y. | −4.0 |
| Stock Yards (Emp. bene.), Ky. | −4.1 |
| Liberty Nat'l, Okla. | −4.3 |
| First Variable Life, Ark. | −4.3 |
| American Security, D.C. | −4.4 |
| **Standard & Poor's** | **−8.4** |

### 5-year returns

| | % |
|---|---|
| Sun Bank, Fla. | 27.0 |
| First RepublicBank, Texas | 20.6 |
| First Fidelity (Discr.), N.J. | 20.3 |
| First Interstate of Oregon | 19.6 |
| Guardian Insurance (VA 1), N.Y. | 19.5 |
| Bank of New England (Valuepath) | 18.8 |
| MTrust (Value), Texas | 18.4 |
| First of America, Mich. | 18.1 |
| First of Omaha (D), Neb. | 18.0 |
| Mellon Equity Associates | 17.9 |
| Nat'l Bank of Commerce, Tenn. | 17.6 |
| First N. H. Investment (Emp. A) | 17.5 |
| Provident Nat'l, Pa. | 17.4 |
| LaSalle Nat'l (Intr.), Ill. | 17.2 |
| Sovran Bank (Inst.), Va. | 17.0 |
| Colorado Nat'l Bank | 17.0 |
| C&S Trust Florida | 16.9 |
| Nationwide Life, Ohio | 16.9 |
| First of Neenah, Wis. | 16.8 |
| College Ret. Equities Fund | 16.8 |
| Meridian Trust, Pa. | 16.7 |
| U.S. Nat'l of Galveston, Texas | 16.7 |
| Mutual of New York (Income) | 16.7 |
| First Fidelity, N.J. | 16.7 |
| Dominion Trust (Corp.), Va. | 16.7 |
| Morgan Guaranty (Lg. co.), N.Y. | 16.7 |
| First of Chicago | 16.6 |
| Phoenix Mutual, Conn. | 16.6 |
| Citizens Fidelity (E), Ky. | 16.6 |
| Manufacturers Detroit | 16.6 |
| NBD Trust, Ill. | 16.6 |
| Massachusetts Mutual | 16.5 |
| First Alabama Bank (I) | 16.5 |
| First Union Bank, N.C. | 16.5 |
| Principal Mutual Life, Iowa | 16.5 |
| Pioneer Bank, Ill. | 16.5 |
| John Hancock (1K), Mass. | 16.5 |
| Confederation Life, Ontario | 16.4 |

| | |
|---|---|
| First American of Georgia | 16.4 |
| Citytrust (E1), Conn. | 16.3 |
| Irving Trust, N.Y. | 16.2 |
| Philadelphia Nat'l | 16.1 |
| AmeriTrust (Diver.), Ohio | 16.1 |
| First of Maryland | 16.1 |
| American Nat'l Chicago (Active) | 16.0 |
| Northern States Trust, Ill. | 16.0 |
| Frost Nat'l (A), Texas | 16.0 |
| Valley Nat'l (I), Ariz. | 16.0 |
| Lake Shore Nat'l, Ill. | 16.0 |
| Bankers Trust (Index), N.Y. | 15.9 |
| Mercantile Safe, Md. | 15.9 |
| First Jersey Nat'l, N.J. | 15.8 |
| Norstar Trust, N.Y. | 15.8 |
| Mercantile Bank, Mo. | 15.8 |
| **Standard and Poor's** | **15.6** |

### 10-year returns

| | % |
|---|---|
| Sun Bank, Fla. | 23.6 |
| Manufacturers Life, Ontario | 21.7 |
| First Fidelity (Disc.), N.J. | 20.8 |
| Guardian Insurance (VA 1), N.Y. | 20.6 |
| The New England (Growth) | 20.4 |
| First Union Bank, N.C. | 20.3 |
| U.S. Nat'l of Oregon (Qualivest) | 19.7 |
| First Interstate of Oklahoma | 19.6 |
| Equitable Life (4), N.Y. | 19.4 |
| MTrust (Growth), Texas | 19.3 |
| Confederation Life, Ontario | 19.3 |
| United of Denver | 19.2 |
| First of Omaha (D), Neb. | 19.2 |
| First N.H. Investment (Emp. A) | 19.0 |
| Provident Nat'l | 19.0 |
| Citizens Chillicothe (Emp. B), Mo. | 19.0 |
| First Trust, Colo. | 19.0 |
| First RepublicBank, Texas | 18.9 |
| Bessemer Trust, N.Y. | 18.8 |
| Home Life, N.Y. | 18.7 |
| Nat'l Bank of Commerce, Neb. | 18.7 |
| U.S. Nat'l of Galveston, Texas | 18.7 |
| MTrust (Value), Texas | 18.7 |
| Philadelphia Nat'l | 18.6 |
| First Interstate of Oregon | 18.5 |
| Lake Shore Nat'l, Ill. | 18.5 |
| Manufacturers Detroit | 18.5 |
| Wheeling Dollar Bank, W. Va. | 18.3 |
| Principal Mutual Life, Iowa | 18.3 |
| Nationwide Life, Ohio | 18.1 |
| Continental Bancorp, Pa. | 18.0 |
| Massachusetts Mutual | 17.9 |
| Texas Commerce (Diver.) | 17.9 |
| Employers Life of Wausau (SA 1) | 17.9 |
| First Fidelity Bank, N.J. | 17.8 |
| Norstar Trust, N.Y. | 17.8 |
| Colorado Nat'l Bank | 17.7 |
| Nat'l City Cleveland | 17.6 |
| C&S Trust Florida | 17.6 |
| First of America, Mich. | 17.5 |
| Sentry Life (SA B), Wis. | 17.4 |
| First Nat'l Lincoln, Neb. | 17.3 |
| Aetna Life, Conn. | 17.3 |
| Citicorp, N.Y. | 17.2 |
| Phoenix Mutual, Conn. | 17.2 |
| Citytrust (E1), Conn. | 17.2 |
| American Nat'l Chicago (Active) | 17.2 |
| **Standard and Poor's** | **16.8** |

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# Equities

*Continued from page 29*

turn. The bank made the top 10% for the 10-year period, with a compound annual 19.2%, and the top 20% for three years, with 18.6%, and the quarter, with 10%. Due to poor returns in the mid-1980s, the bank's equity fund lagged the S&P 500 for the five-year period with 14.6%.

The $25 million fund buys severely depressed, out-of-favor stocks, said W. Lon Schreur, president of United Capital Management. Recently, the fund has been heavily invested in capital goods stocks. These included **Bethlehem Steel Corp., Kaiser Aluminum & Chemical Corp., Caterpillar Inc., Clark Equipment Co.** and **Phelps Dodge Corp.**

Sun Banks Inc., Orlando, Fla., topped the three-, five- and 10-year returns for the second consecutive quarter. The bank's equity fund returned 29.7% for the three years, 27% for the five years and 23.3% for the 10 years. For the year, it was in the top 20% with −1.6%; for the quarter, the fund dropped in the rankings but still beat the index and median fund with a 7.3% return.

The $340 million fund buys large-capitalization stocks with above-average growth and makes major sector bets. The fact large stocks lagged small ones in the quarter hurt performance, as did poor returns in health care and technology, said Anthony J. Gray, president of Sun Banks Investment Management Group.

Still, the fund's long-term stock-picking record is good. Major holdings include **CPC International Inc., The Dow Chemical Co., General Electric Co., Johnson & Johnson, Apple Computer Inc.** and **Digital Equipment Corp.** ■

# Bonds

*Continued from page 28*

uses the closing prices of five-year notes, Mr. Hobman said, then applies a proprietary technical signal system to forecast the swings.

Delaware Trust Co.'s employee benefit income fund has been a top performer for the long term, finishing second in the three-year period with a compound annualized return of 18.5% and first for the five years, with a compound annualized 16%.

The PIPER median returned 12.6% for the three-year period and 11.6% for the five years. The Shearson Lehman Government/Corporate index posted 13.3% and 12.3% for the same time periods.

"We are always fully invested," said David Baldt, fixed-income manager and senior vice president for the Wilmington-based trust company. "We do not attempt to do any interest rate forecasting."

The employee benefit/profit sharing pension fund was no slouch in the shorter periods either, finishing in the top 10% for the quarter at 5.33% and beating the median fund for the 12 months with a 5.44% return.

"We invest in high-grade bonds — well over 80% are AAA — with average maturity range of five to 12 years," Mr. Baldt said.

Now, the fund is principally invested in mortgage-backed securities and is actively traded.

The top ranking 10-year performance was turned in by United of Denver's bond fund, which is run by the bank's investment counseling group, United Capital Management.

The fund returned a compound-annualized 13.4% over the 10-year period, compared with the PIPER median of 10.22% and the Shearson Lehman Government/Corporate return of 10.66%. ■

## Top equity funds by size

### 1-year returns

| Over $100 million | % |
|---|---|
| First of Chicago | 14.3 |
| Bessemer Trust, N.Y. | −1.3 |
| Sun Bank, Fla. | −1.6 |
| Meridian Trust, Pa. | −3.1 |
| Massachusetts Mutual | −3.3 |
| Mutual of New York (Income) | −3.9 |
| Provident Nat'l, Pa. | −4.6 |
| AmeriTrust (Divers.), Ohio | −4.7 |
| MTrust (Growth), Texas | −4.7 |
| Crestar Bank (5822) | −5.0 |

| $50 million to $100 million | % |
|---|---|
| Sovran Bank (Inst.), Va. | 1.7 |
| Phoenix Mutual, Conn. | 1.6 |
| Norstar Trust, N.Y. | −1.0 |
| First Interstate of Oregon | −2.1 |
| First Jersey Nat'l, N.J. | −2.3 |
| AmSouth, Ala. | −2.3 |
| Trust Co. of Georgia | −3.8 |
| Citicorp (Stockshift 100), N.Y. | −4.0 |
| American Security, D.C. | −4.4 |
| Mercantile Safe, Md. | −5.2 |
| Chicago Title & Trust | −5.2 |

| $10 million to $50 million | % |
|---|---|
| First Fidelity (Disc.), N.J. | 17.4 |
| United of Denver | 10.6 |
| First of Maryland | 5.4 |
| Crown Life (U.S. grp.), Ontario | 3.7 |
| EF Hutton (2), Del. | 2.9 |
| Confederation Life, Ontario | 1.5 |
| Jefferson Trust, (Gro.), Ill. | 1.1 |
| First Fidelity Bank, N.J. | 0.4 |
| Capital Trust (I), Ore. | 0.1 |
| C&S Trust Florida | −0.2 |

| Under $10 million | % |
|---|---|
| Pioneer Bank, Ill. | 3.8 |
| Security Nat'l Bank, W. Va. | 2.7 |
| Gary Wheaton Bank (Hedged) | 2.5 |
| Calcasieu Marine Nat'l (E), La. | 2.4 |
| Bank One, Richmond (C) | −0.2 |
| State Bank (Retire. C), Ohio | −0.5 |
| First Illinois (Corp.) | −2.2 |
| Associated Manitowoc, Wis. | −2.4 |
| First Interstate of Texas | −3.0 |
| First N.H. Investment (A) | −3.1 |

### 10-year returns

| Over $100 million | % |
|---|---|
| Sun Bank, Fla. | 23.3 |
| Manufacturers Life, Ontario | 21.7 |
| First Union Bank, N.C. | 20.3 |
| Equitable Life (4), N.Y. | 19.4 |
| MTrust (Growth), Texas | 19.3 |
| Provident Nat'l, Pa. | 19.0 |
| Bessemer Trust, N.Y. | 18.8 |
| Philadelphia Nat'l | 18.6 |
| Manufacturers Detroit | 18.5 |
| Principal Mutual Life, Iowa | 18.3 |

| $50 million to $100 million | % |
|---|---|
| The New England (Growth) | 20.4 |
| First Interstate of Oregon | 18.5 |
| Texas Commerce (Divers.) | 17.9 |
| Norstar Trust, N.Y. | 17.8 |
| Sentry Life (SA B), Wis. | 17.4 |
| Phoenix Mutual, Conn. | 17.2 |
| Mercantile Safe, Md. | 17.0 |
| Chase Manhattan (B), N.Y. | 16.8 |
| AmSouth, Ala. | 16.7 |
| Sovran Bank (Inst.), Va. | 16.6 |

| $10 million to $50 million | % |
|---|---|
| First Fidelity (Disc.), N.J. | 20.8 |
| Guardian Insurance (VA 1) | 20.6 |
| First Interstate/Oklahoma | 19.6 |
| Confederation Life, Ontario | 19.3 |
| United of Denver | 19.2 |
| First of Omaha (D), Neb. | 19.2 |
| Citizens Chillicothe (B),Mo. | 19.0 |
| First Trust, Colo. | 19.0 |
| Home Life, N.Y. | 18.7 |
| Nat'l Bank of Commerce, Neb. | 18.7 |
| U.S. Nat'l/Galveston, Texas | 18.7 |
| MTrust (Value), Texas | 18.7 |

| Under $10 million | % |
|---|---|
| First N.H. Investment (Emp. A) | 19.0 |
| Puget Sound Nat'l, Wash. | 15.6 |
| First Interstate of Texas | 15.2 |
| Merchants Nat'l (2), Ind. | 15.1 |
| Great West Life (VAAA) | 14.9 |
| Travelers, Conn. | 14.7 |
| American Nat'l (Growth), Ind. | 14.6 |
| First in Bartlesville, Okla. | 14.5 |
| Associated Manitowoc, Wis. | 14.5 |
| Second Nat'l (Emp.),Ohio | 14.4 |

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Published every other week by Crain Communications, Inc. Offices at 220 E. 42nd St., New York 10017 (212/210-0100); 740 N. Rush St., Chicago 60611 (312/649-5200); 814 National Press Bldg., Washington, D.C. 20045 (202/662-7200); 6404 Wilshire Blvd., Los Angeles 90048 (213/651-3710); 1 NorthPark East, Suite 114, 8080 Central Expwy., Dallas 75231 (214/692-6848).

$4.50 an issue, $80 a year in the U.S. Add $37 per year for air delivery to Europe and the Middle East. Add $30 per year for surface mail to all other foreign countries. Add $50 per year for air delivery in U.S. and $57 for air delivery in Canada.

WILLIAM STRONG, vp-circulation, JOHN HUFFMAN, fulfillment director. Four weeks notice required for change of address. Address all subscription correspondence to Pensions & Investment Age, 965 Jefferson, Detroit, Mich. 48207. Telex number: 25-4945; Cable address: CRAINCOM. Microfilm copies are available from University Microfilms, 300 N. Zeeb Rd., Ann Arbor, Mich. 48021. Microfiche copies are available from Bell & Howell, Micro Photo Division, Old Mansfield Rd., Wooster, Oh. 44691.

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# Asset growth slows

## Top 100 managers pass $2 trillion mark despite Oct. 19

By Carol Wiley

The strong annual increases in assets managed by the nation's largest 100 money managers ended in 1987, when more than nine months' investment return was wiped out by Black Monday.

Tax-exempt assets recorded the most dramatic slowdown, growing 11.7% — to $1.158 trillion — in the year ended Jan. 1, vs. 23% in 1986.

Total assets of the Top 100 grew 13.4% last year, compared with 22.4% in 1986. Despite the slower growth, *Pensions & Investment Age*'s 100 largest money managers did pass the $2 trillion milestone: their total assets reached $2.054 trillion as of Jan. 1, compared with $1.811 trillion a year earlier.

Part of the increase is due to several money management firms making their first appearance in *P&I Age*'s annual survey. Assets of the new firms created a net addition of approximately $12 billion, or 20%, from 1987's survey.

But about 6% to 9% of the increase can be attributed to the 3% to 4% the average stock/bond mix would have earned last year and the 3% to 5% institutional investors probably contributed, according to Corrine Holden, director of manager research at Ennis, Knupp & Associates, Chicago.

Ms. Holden cited other reasons for the growth: "There's no reason to think that passive managers haven't continued to grow," she said. "Clients also have increased their allocations to real estate as a hedge."

Many of the larger firms have created pooled fund vehicles with smaller minimums for smaller plans, which also has resulted in more money for the large money managers, she said.

Among other highlights of *P&I Age*'s 15th annual directory:

- The tax-exempt asset mix of the Top 200 investment management firms, as well as all the managers, showed an exodus from equities.

Among the Top 200, the move was to real estate and alternative investments; overall, it was into bonds, cash and mortgage-backed securities.

Among the Top 200, the average asset mix Jan. 1 was 45% stocks, down from 48% a year earlier; 30% bonds, the same as the previous year; 10% cash, also holding steady; 7% in equity real estate, up from 6%; 2% in mortgage-backed securities, the same as the previous year; 2% in mortgages, up from 1%; and 4% other, up from 3%.

The average asset mix for all managers profiled Jan. 1 was 47% stocks, down from 54%; 26% bonds, up from 23%; 14% cash, up from 10%; 6% equity real estate, the same as the previous year; 1% mortgages and 2% mortgage-backed securities, both steady from last year; and 4% other.

- The largest 200 managers experienced an increase in total assets of 13.2%, to $2.292 trillion from $2.024 trillion as of Jan. 1, 1987; their tax-exempt assets grew 10.9%, to $1.412 trillion from $1.273 trillion.
- Total assets under management by 971 investment advisers participating in the survey were $3.035 trillion, up from $2.685 trillion for the 930 managers profiled last year. Canadian managers were excluded from both totals. Tax-exempt assets of the managers reached $1.687 trillion, from $1.516 trillion a year earlier.
- Insurance companies and their subsidiaries recaptured the lead in tax-exempt market share among the 100 largest this year, beating the banks and their subsidiaries 38% vs. 35%. Among the 200 largest managers, however, banks retained the lead, holding 35% to the insurers' 33%.
- The 25 largest managers of bond index funds experienced a whopping 83.8% increase in assets. (All rankings of the 25 largest managers are by tax-exempt assets under management in that category.)
- The 25 largest real estate managers also increased assets significantly — 44.5%.
- International investments went down with the international equity markets, however, and the 25 largest international managers showed a $309 million decrease in assets.

The market's volatility frightened some investors into seriously hedging their risk, which helped insurance companies — big players in the guaranteed investment contract market — increase their share of the market.

And defined contribution plans are increasing their use of GICs, further boosting business for insurers.

"In spite of the fact defined benefit plans are not renewing their contracts, sales to defined contribution plans are big enough so that our total in GICs gets larger," said Dennis Donahue, assistant vice president at Aetna Life Insurance Co., Hartford, Conn.

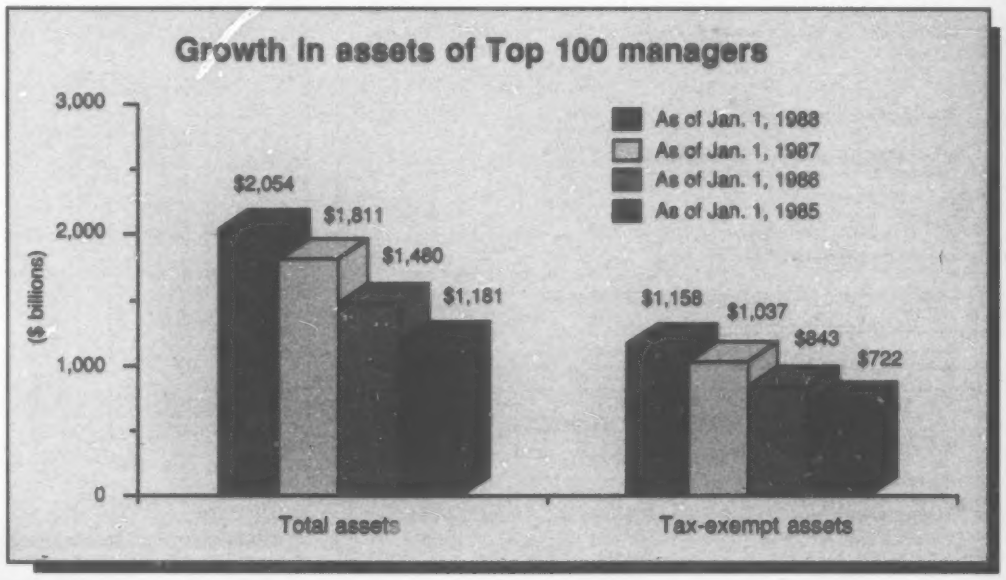
In addition, insurance companies were less exposed to the equity market and, therefore, lost less money in the October crash.

"It's a measure of market volatility more than anything else," said Harvey Young, senior vice president at Metropolitan Life Insurance Co., New York. "Insurance companies are underexposed to equities and overexposed to fixed income.

"Insurance companies also are acquiring independent managers (the past few years) and are competing on more equal footing with bank trust departments and money managers."

The 83.8% increase in bond index funds was the second superlative year in a row for that investment area: between Jan. 1,

*Continued on page 112*



Cover by Avalon Studios, Chicago

Vol. 16, No. 11 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1988.

PENSIONS & InvestmentAge

The newspaper of corporate and institutional investing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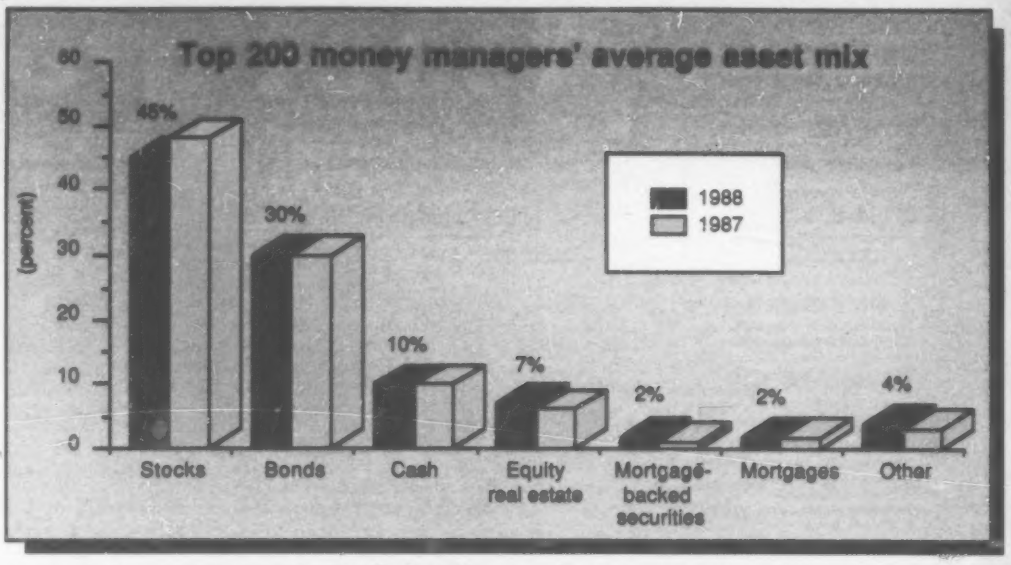
| Top 25 banks & trusts | 16 | Manager of managers | 96 |
| Top 25 insurers | 22 | Options overwriters | 96 |

## Profile statistics at a glance

| | |
|---|---|
| **Total managers profiled** | **1,010** |
| Banks, trust cos. and subsidiaries | 227 |
| Insurance cos. and subsidiaries | 79 |
| Investment counselors | 666 |
| Canadian managers* | 38 |
| **Total portfolio managers employed** | **6,667** |
| **Total security analysts employed** | **5,419** |
| **Stocks watched closely (average)** | |
| By banks | 200 |
| By insurance companies | 335 |
| By investment counselors | 205 |
| **Stocks watched generally (average)** | |
| By banks | 665 |
| By insurance companies | 1,307 |
| By investment counselors | 832 |
| **Percentage of in-house research (average)** | |
| By banks | 52 |
| By insurance companies | 67 |
| By investment counselors | 67 |
| **No. of managers using options** | **298** |
| **No. of managers using stock-index futures** | **138** |
| **No. of managers using fixed-income futures** | **132** |
| **Total assets managed ($ millions)** | **3,035,276** |
| Top 200 | 2,291,782 |
| Top 100 | 2,054,358 |
| **Tax-exempt assets managed ($ millions)** | **1,686,676** |
| Top 200 | 1,412,111 |
| Top 100 | 1,157,810 |
| **Tax-exempt assets managed ($ millions)** | |
| Banks, trust cos. and subsidiaries | 581,394 |
| Insurance cos. and subsidiaries | 487,055 |
| Investment counselors | 618,227 |
| **Real estate assets managed ($ millions)** | **96,082** |
| Equity real estate | 78,375 |
| Mortgages | 17,707 |
| **Mortgage-backed securities** | **34,482** |
| **International assets managed ($ millions)** | **54,717** |
| Equity | 35,562 |
| Bonds | 13,524 |
| Cash | 3,631 |
| **Assets invested in GICs ($ millions)** | **117,196** |
| **Assets invested in 401(k) / 457 plans ($ millions)** | **61,897** |

* All other statistics exclude Canadian managers

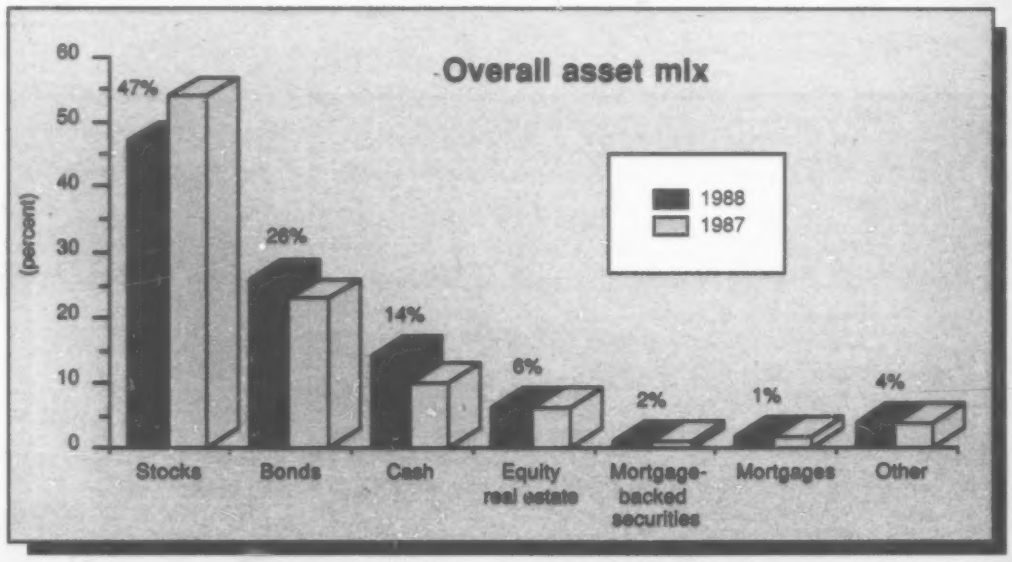


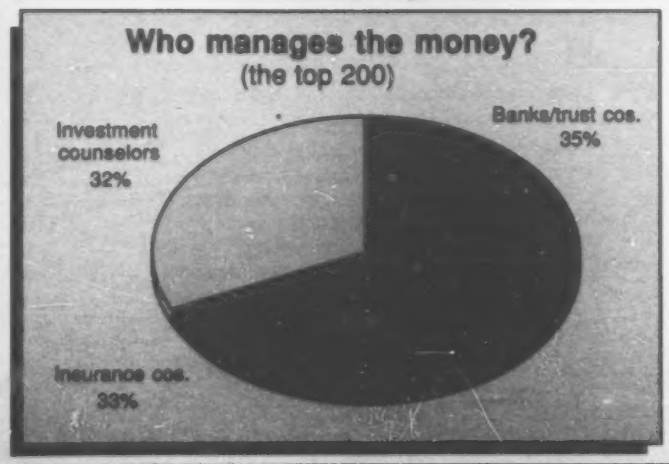

### Tax-exempt asset mix (by adviser)

| | Banks | Insurance companies | Investment counselors |
|---|---|---|---|
| Stocks | 41% | 47% | 50% |
| Bonds | 37 | 26 | 23 |
| Cash | 13 | 9 | 15 |
| Equity real estate | 4 | 6 | 6 |
| Mortgages | 1 | 4 | 1 |
| Mtg.-backed securities | 2 | 2 | 1 |
| Other | 2 | 6 | 4 |

### Canadian asset mix

| | |
|---|---|
| Canadian equities | 33% |
| Bonds | 35 |
| Cash | 12 |
| Equity real estate | 4 |
| Mortgages | 5 |
| U.S. equities | 8 |
| Other | 3 |






# Statistics gathered from questionnaires

The data contained in the story, profiles, charts and tables in this special issue were developed by *Pensions & Investment Age* from answers to questionnaires.

Detailed questionnaires were sent to client contacts or chief investment officers at more than 2,200 banks, trust companies, insurance companies and independent investment advisers in the United States and abroad. Real estate and international/global managers are included in this issue, although *P&I Age* publishes separate, detailed directories on those subjects.

A team of editorial staff members in Chicago worked on this issue — the 15th annual directory of investment advisers — for almost five months.

All quantifiable answers to the questionnaires were entered into a spreadsheet program from which the charts, tables and other statistics were compiled.

All information, except where noted, is as of Jan. 1, 1988.

As in previous years, all managers were asked to provide total and tax-exempt institutional assets under management; the tax-exempt institutional asset mix; kinds, numbers and names of tax-exempt institutional clients; areas of investment capabilities; investment approaches to stocks, bonds and real estate, where appropriate; names and titles of chief investment officer and client contact; the parent company; and dollar amounts invested in categories such as equity real estate, mortgage-backed securities, mortgages, foreign investments, indexed funds and dedicated/immunized bond portfolios.

Banks and trust companies also were asked to break out the tax-exempt assets into commingled and separate accounts, with numbers of clients in each category.

Insurance companies were asked to give detailed information about the separate and general accounts.

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# Top 100 managers by total assets ($ mil.)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1. Metropolitan Life | 86,085 | 27. Mitchell Hutchins Institutional | 21,092 | 52. State Street Research | 14,633 | 77. Centerre Trust | 10,287 |
| 2. Merrill Lynch | 82,000 | 28. Northern Trust | 20,500 | 53. The New England | 14,505 | 78. Sanford C. Bernstein | 10,100 |
| 3. Fidelity M&R | 75,000 | 29. Jennison Associates | 20,439 | 54. Harris Trust & Savings | 14,293 | 79. Connecticut Mutual Life | 10,025 |
| 4. Aetna Life | 64,496 | 30. Chase Investors | 20,400 | 55. Goldman Sachs | 14,190 | 80. Mutual Benefit Life | 9,914 |
| 5. Bankers Trust | 57,845 | 31. T. Rowe Price | 20,130 | 56. Capital Guardian Trust | 14,122 | 81. AIM Capital | 9,720 |
| 6. Prudential Asset | 55,166 | 32. JMB Institutional | 19,900 | 57. U.S. Trust/N.Y. | 14,037 | 82. First Chicago Investment | 9,507 |
| 7. Travelers Cos. | 54,000 | 33. BZW Investment | 19,837 | 58. Bank of New York | 13,800 | 83. Manufacturers Nat'l/Detroit | 9,061 |
| 8. J.P. Morgan | 52,975 | 34. Mass Mutual Life | 19,800 | 59. Neuberger & Berman | 13,148 | 84. Nat'l Bank/Detroit | 8,900 |
| 9. Wells Fargo | 49,981 | 35. Massachusetts Financial | 19,475 | 60. Stein Roe & Farnham | 13,091 | 85. Lord, Abbett | 8,898 |
| 10. Kemper Financial | 43,941 | 36. Mellon Capital | 19,200 | 61. Henderson Administration | 13,000 | 86. Lazard Freres | 8,803 |
| 11. John Hancock Financial | 40,668 | 37. Capital Research/Mgmt. | 18,312 | 62. Vanguard Group | 12,800 | 87. Criterion Investment | 8,598 |
| 12. Putnam Cos. | 40,646 | 38. The Principal | 18,216 | 63. Morgan Stanley Asset | 12,448 | 88. Irving Trust | 8,534 |
| 13. Scudder, Stevens & Clark | 36,738 | 39. Wilmington Trust | 18,038 | 64. Transamerica Investment | 12,367 | 89. Batterymarch Financial | 8,220 |
| 14. Citicorp Investment | 34,675 | 40. First RepublicBank | 17,500 | 65. Oppenheimer Capital | 12,201 | 90. First Wachovia | 8,100 |
| 15. Equitable Real Estate | 32,857 | 41. Mellon Bond | 16,875 | 66. Brown Brothers Harriman | 11,687 | 91. AIG Global | 8,000 |
| 16. New York Life | 32,792 | 42. Daiwa Int'l | 16,602 | 67. Delaware Investment Advisors | 11,434 | 92. BEA Associates | 7,603 |
| 17. Equitable Capital | 31,303 | 43. Lehman Mgmt. | 16,077 | 68. Trust Co. of the West | 11,145 | 93. Standish, Ayer & Wood | 7,524 |
| 18. State Street Bank | 30,470 | 44. Mitchell Hutchins Asset | 15,610 | 69. Fischer, Francis, Trees | 11,100 | 94. Lincoln Capital | 7,442 |
| 19. Alliance Capital | 30,132 | 45. Fiduciary Trust | 15,539 | 70. Copley Real Estate | 11,000 | 95. Boatmen's Nat'l/St. Louis | 7,417 |
| 20. Wellington/TDP&L | 28,435 | 46. Great-West Life | 15,524 | 71. RCM Capital | 10,875 | 96. Nationwide Life | 7,285 |
| 21. GE Investments | 27,400 | 47. County NatWest | 15,194 | 72. INVESCO | 10,702 | 97. VALIC | 7,265 |
| 22. CIGNA Asset | 24,102 | 48. Pacific Investment | 15,176 | 73. AmeriTrust | 10,687 | 98. The Phoenix | 7,000 |
| 23. MONY Financial | 22,568 | 49. Chemical Investment | 15,000 | 74. Fayez Sarofim | 10,542 | 99. Pacific Financial Cos. | 6,981 |
| 24. Hutton Asset | 22,243 | 50. Miller, Anderson & Sherrerd | 14,856 | 75. Templeton Int'l | 10,400 | 100. J&W Seligman | 6,775 |
| 25. Loomis, Sayles | 22,142 | 51. Bernstein-Macaulay | 14,732 | 76. American Nat'l/Chicago | 10,320 | Total | 2,054,358 |
| 26. Boston Co. | 21,188 | | | | | | |

# All managers ranked by tax-exempt assets

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 1. Prudential Asset | 55,166 | 45. Copley Real Estate | 8,700 | 89. Nat'l Bank/Detroit | 4,400 | 133. STW Fixed Income | 2,823 |
| 2. Bankers Trust-Investment | 52,807 | 46. Sanford C. Bernstein | 8,600 | 90. Security Pacific Investment | 4,319 | 134. United Capital | 2,765 |
| 3. J.P. Morgan Investment | 51,115 | 47. Wellington Mgmt./TDP&L | 8,523 | 91. MacKay-Shields | 4,250 | 135. Connecticut Mutual Life | 2,735 |
| 4. Wells Fargo Investment | 49,981 | 48. Criterion Investment | 8,432 | 92. Manufacturers Nat'l/Detroit | 4,021 | 136. Aldrich, Eastman & Waltch | 2,700 |
| 5. Metropolitan Life | 41,113 | 49. Chemical Investment Group | 8,400 | 93. Dimensional Fund Advisors | 3,975 | 137. Kemper Financial | 2,628 |
| 6. Aetna Life | 40,586 | 50. Morgan Stanley Asset | 8,292 | 94. Dodge & Cox | 3,960 | 138. State Mutual Cos. | 2,600 |
| 7. State Street Bank | 28,930 | 51. MONY Financial Services | 8,240 | 95. Forstmann-Leff Associates | 3,936 | 139. Gardner & Preston Moss | 2,578 |
| 8. Travelers Cos. | 24,686 | 52. Northern Trust | 7,600 | 96. Nationwide Life | 3,934 | 140. Capitolina Investment | 2,567 |
| 9. CIGNA Asset | 21,705 | 53. Lazard Freres Asset | 7,550 | 97. Western Asset | 3,896 | 141. Mellon Equity Associates | 2,544 |
| 10. Alliance Capital | 20,984 | 54. Lincoln Capital | 7,388 | 98. Columbia Mgmt. | 3,882 | 142. Independence Investment | 2,537 |
| 11. Jennison Associates | 20,439 | 55. Putnam Cos. | 7,361 | 99. Pittsburgh Nat'l Bank | 3,876 | 143. Fred Alger Mgmt. | 2,525 |
| 12. GE Investments | 19,900 | 56. BEA Associates | 7,206 | 100. UNUM Life | 3,841 | 144. Bear Stearns Asset | 2,515 |
| 13. Mellon Capital | 19,180 | 57. VALIC | 7,064 | 101. Atalanta/Sosnoff Capital | 3,821 | 145. U.S. Trust-New York | 2,507 |
| 14. Mitchell Hutchins Inst'l | 18,427 | 58. Batterymarch Financial | 6,748 | 102. Standish, Ayer & Wood | 3,803 | 146. Newbold's Asset Mgmt. | 2,501 |
| 15. Equitable Capital | 17,975 | 59. Neuberger & Berman | 6,581 | 103. Continental Assurance | 3,721 | 147. Wilshire Asset Mgmt. | 2,500 |
| 16. Loomis, Sayles | 17,476 | 60. AmeriTrust | 6,438 | 104. Washington Square Capital | 3,699 | 148. Massachusetts Financial | 2,485 |
| 17. Citicorp Investment | 17,246 | 61. Brown Brothers Harriman | 6,406 | 105. Heitman Advisory | 3,685 | 149. Hotchkis & Wiley | 2,406 |
| 18. Equitable Real Estate | 16,906 | 62. Transamerica Investment | 6,186 | 106. Dewey Square Investors | 3,600 | 150. Constitution Capital | 2,393 |
| 19. Mellon Bond Associates | 16,665 | 63. Fidelity Mgmt. & Research | 6,000 | 107. Trinity Investment | 3,553 | 151. Todd Investment Advisors | 2,392 |
| 20. Chase Investors | 15,900 | 64. Capital Supervisors | 5,852 | 108. IDS Equity/Fixed-Income | 3,548 | 152. Morgan Grenfell Investment | 2,378 |
| 21. Boston Co. | 15,572 | 65. JMB Institutional Realty | 5,800 | 109. Bank One Indianapolis | 3,504 | 153. The Phoenix | 2,355 |
| 22. Pacific Investment | 15,133 | 66. Boatmen's Nat'l/St. Louis | 5,711 | 110. Bank of New York | 3,500 | 154. Connecticut Nat'l Bank | 2,354 |
| 23. John Hancock Financial | 15,070 | 67. Northern Investment | 5,566 | 111. PRIMCO Capital | 3,500 | 155. M.D. Sass Investor Services | 2,354 |
| 24. Miller, Anderson & Sherrerd | 14,856 | 68. Great-West Life | 5,500 | 112. Denver Investment Advisors | 3,449 | 156. United Missouri Investment | 2,350 |
| 25. Capital Guardian Trust | 13,937 | 69. Duff & Phelps Investment | 5,474 | 113. Shields Asset Mgmt. | 3,400 | 157. Dreman Value Mgmt. | 2,336 |
| 26. Fiduciary Trust | 12,744 | 70. Irving Trust | 5,341 | 114. Associated Capital | 3,375 | 158. Hibernia Nat'l Bank | 2,323 |
| 27. New York Life | 12,460 | 71. Mutual Benefit Life | 5,332 | 115. Hartford Life | 3,336 | 159. Sun Bank Investment | 2,300 |
| 28. The Principal | 12,209 | 72. New England | 5,306 | 116. Mutual of America Life | 3,332 | 160. Morley Capital Mgmt. | 2,285 |
| 29. Lehman Mgmt. | 11,920 | 73. Discount Corp. of N.Y. | 5,285 | 117. Kennedy Associates | 3,300 | 161. Provident Investment Counsel | 2,244 |
| 30. Oppenheimer Capital | 11,914 | 74. Stein Roe & Farnham | 5,266 | 118. Provident Capital Mgmt. | 3,189 | 162. TSA Capital | 2,214 |
| 31. State Street Research & Mgmt. | 11,393 | 75. Jamison, Eaton & Wood | 5,251 | 119. First Fidelity Bank | 3,100 | 163. Thompson, Siegel & Walmsley | 2,205 |
| 32. Delaware Investment Advisors | 11,216 | 76. Fidelity Mgmt. Trust | 5,206 | 120. Mercantile-Safe Deposit & Trust | 3,100 | 164. AmSouth Bank | 2,200 |
| 33. INVESCO Capital | 10,602 | 77. Investment Advisers | 5,200 | 121. Mississippi Valley Advisors | 3,100 | 165. Corporate Property Investors | 2,200 |
| 34. Scudder, Stevens & Clark | 10,495 | 78. ASB Capital Mgmt. | 4,963 | 122. NCNB Nat'l Bank | 3,072 | 166. First Kentucky Trust | 2,174 |
| 35. Trust Co. of the West | 10,306 | 79. Nat'l Investment Services | 4,979 | 123. RREEF | 3,044 | 167. Richard Ellis | 2,165 |
| 36. First RepublicBank Asset | 9,992 | 80. Provident Nat'l Assurance | 4,951 | 124. Lord, Abbett | 3,038 | 168. Sit Investment | 2,155 |
| 37. American Nat'l/Chicago | 9,763 | 81. Barrow Hanley Mewhinney | 4,929 | 125. Capital Research & Mgmt. | 3,031 | 169. Investment Counselors/Md. | 2,141 |
| 38. RCM Capital | 9,675 | 82. Centerre Trust | 4,881 | 126. Nat'l City Bank/Cleveland | 3,019 | 170. Fleet Nat'l Bank | 2,100 |
| 39. Mass Mutual Life | 9,300 | 83. First Wachovia | 4,800 | 127. Wright Investors' Service | 2,999 | 171. Geewax, Terker | 2,100 |
| 40. First Chicago Investment | 9,245 | 84. McMorgan | 4,800 | 128. First Asset Mgmt. | 2,967 | 172. LaSalle Advisors | 2,100 |
| 41. Fischer, Francis, Trees & Watts | 9,200 | 85. Merrill Lynch Asset | 4,800 | 129. Indiana Investment Advisors | 2,950 | 173. Norwest Capital Resources | 2,044 |
| 42. Fayez Sarofim | 9,160 | 86. Sears Investment | 4,742 | 130. Glenmede Trust | 2,941 | 174. Invista Capital | 2,016 |
| 43. Harris Trust & Savings | 8,793 | 87. Trusco Capital | 4,500 | 131. First Union Nat'l Bank | 2,900 | 175. Rowe Price-Fleming Int'l | 2,006 |
| 44. T. Rowe Price | 8,705 | 88. Pacific Financial Cos. | 4,496 | 132. Weiss, Peck & Greer | 2,870 | 176. Franklin Portfolio Associates | 2,001 |

# All managers ranked by tax-exempt assets (part 2)

177. Manning & Napier Advisors 2,000
178. Templeton Int'l 2,000
179. Balcor 2,000
180. Comerica Bank-Detroit 1,990
181. Wentworth Hauser & Violich 1,969
182. Concord Capital 1,965
183. Olympic Capital 1,960
184. Vaughan, Nelson, Scarborough 1,950
185. C&S Investment Advisors 1,947
186. First Wisconsin Trust 1,883
187. Cooke & Bieler 1,882
188. Grantham, Mayo, Van Otterloo 1,857
189. First Manhattan Capital 1,850
190. Shearson Asset Mgmt. 1,848
191. Society Nat'l Bank 1,846
192. F.I.A. Associates 1,828
193. Lowe, Brockenbrough, Tierney 1,806
194. Baring Int'l 1,801
195. CMB Investment Counselors 1,800
196. Fidelity Int'l 1,800
197. J.H. Ayres 1,800
198. Rosenberg Inst'l Equity 1,784
199. BancOklahoma Trust 1,770
200. Crown Life Insurance 1,748
201. PRIMECAP Mgmt. 1,735
202. Fidelity Bank 1,732
203. Strong/Corneliuson Capital 1,720
204. First Kentucky Co. 1,700
205. John W. Bristol 1,700
206. McGlinn Capital 1,700
207. Pacific Century Advisors 1,672
208. Norstar Investment Advisory 1,649
209. Solomon Asset Mgmt. 1,629
210. Eastdil Realty 1,626
211. Penn Mutual Life 1,608
212. Amalgamated Bank-New York 1,600
213. Luther King Capital 1,600
214. Schroder Capital Mgmt. Int'l 1,600
215. Midlantic Nat'l Bank 1,589
216. First Investment Mgmt. 1,587
217. J&W Seligman 1,562
218. Dreyfus Mgmt. 1,550
219. Sovran Capital 1,550
220. Continental Capital Mgmt. 1,539
221. Hutton Asset Mgmt. 1,536
222. Union Labor Life 1,536
223. WorldInvest 1,535
224. M&I Investment Mgmt. 1,530
225. Chicago Title & Trust 1,500
226. Dillon, Read Capital 1,490
227. Fifth Third Bank 1,483
228. Old Kent Bank & Trust 1,475
229. Pacific Financial Research 1,466
230. Baring America Asset 1,446
231. CoreStates Investment 1,430
232. Hagler, Mastrovita & Hewitt 1,430
233. Drexel Burnham Lambert 1,425
234. N.M. Rothschild Int'l 1,420
235. Siebel Capital Mgmt. 1,420
236. Brundage, Story & Rose 1,407
237. Lee, Robinson & Steine 1,400
238. General American Life 1,370
239. Eaton Vance Mgmt. 1,369
240. Jundt/Capen Associates 1,367
241. Allstate Life 1,331
242. Merganser Capital Mgmt. 1,329
243. Glickenhaus 1,300
244. First Pacific Advisors 1,285
245. Warburg, Pincus Counsellors 1,282
246. Southwestern Life 1,279
247. Home Life 1,278
248. United of Omaha Life 1,267
249. Latimer & Buck Real Estate 1,250
250. General American Investors 1,246
251. McCowan Associates 1,244
252. Warburg Investment Mgmt. Int'l 1,243
253. Vanguard Group 1,233
254. Atlanta Capital Mgmt. 1,231
255. Value Line Asset Mgmt. 1,220
256. Barnett Banks Trust 1,195
257. Smoot, Miller, Cheney 1,184
258. Robert C. Brown 1,179
259. Goldman, Sachs 1,162
260. Northern Capital Mgmt. 1,162
261. Harbor Capital Mgmt. 1,160
262. Merchants Nat'l Bank 1,160
263. Investment & Capital Mgmt. 1,156
264. Wall, Patterson, Hamilton 1,154
265. One Federal Asset Mgmt. 1,150
266. Harris Associates 1,135
267. Webster Capital 1,133
268. Columbus Circle Investors 1,114
269. Reich & Tang 1,111
270. Stacey Braun Associates 1,110
271. Mellon Real Estate 1,110
272. C.S. McKee 1,100
273. Analytic Investment Mgmt. 1,088
274. Liberty Nat'l Bank & Trust 1,083
275. Renaissance Investment Mgmt. 1,058
276. Peregrine Capital Mgmt. 1,047
277. MTrust 1,042
278. First Interstate Bank-Calif. 1,016
279. Security Capital Real Estate 1,015
280. First Interstate Bank-Ore. 1,014
281. Mitchell Hutchins Asset 1,012
282. Wilmington Trust 1,006
283. Avatar Associates 1,000
284. Hawaiian Trust 1,000
285. Jones Lang Wootton 1,000
286. Norstar Trust 995
287. Alex. Brown Realty 994
288. Pilgrim Baxter Grieg 979
289. NWQ Investment Mgmt. 962
290. Wertheim Asset Mgmt. 956
291. Nomura Capital Mgmt. 951
292. Cashman, Farrell 949
293. Lehndorff & Babson Real Estate 948
294. William Blair 947
295. Reams Asset Mgmt. 943
296. O'Connor Group 930
297. Hellman, Jordan Mgmt. 929
298. Centre Square Investment 928
299. Investors Research 924
300. Wilmington Capital 914
301. HT Investors 911
302. W.R. Lazard 908
303. First Tennessee Investment 906
304. Institutional Capital 903
305. Securities Counsel 897
306. Daniel Breen 896
307. Marinvest 888
308. PCM Int'l 864
309. Lomas & Nettleton Advisory 857
310. Trustcorp Bank, Ohio 857
311. LaSalle Nat'l Bank 855
312. MPT Associates 850
313. Nicholas-Applegate Capital 850
314. Munder Capital 841
315. MSecurities 837
316. Essex Investment 833
317. Brignoli, Curley & Roberts 826
318. Hahn Holland & Grossman 821
319. Ruane, Cunniff 820
320. Waddell & Reed Asset 820
321. Coldwell Banker Capital 817
322. Reimer & Koger Associates 815
323. Commerce Bank 806
324. David J. Greene 803
325. Riggs Nat'l Bank 800
326. United Investment Counsel 800
327. Wolf, Webb, Burk & Campbell 800
328. IDS Trust 793
329. Confederation Life 791
330. L.J. Melody 780
331. G.T. Capital 776
332. Travelers Investment Mgmt. 771
333. Beutel, Goodman Capital 761
334. RINC Capital 750
335. Donald Smith 741
336. Dean Investment Associates 740
337. GAMCO Investors 740
338. Provident Mutual 739
339. Citizens Fidelity 735
340. Wells Fargo Realty 735
341. Public Storage 722
342. Lexington 720
343. BayBank Trust 706
344. FirstInterstate/Wash. 705
345. Beacon Capital 704
346. George D. Bjurman 698
347. Matrix Capital 697
348. Tom Johnson 688
349. Trident Investment 685
350. Lieber 672
351. Frontier Capital 657
352. Capstone Asset 650
353. Property Capital 650
354. Skye Investment 646
355. Anhalt/O'Connell 643
356. Independence One 642
357. Yeager, Wood & Marshall 640
358. Bernstein-Macaulay 637
359. U.S. Trust Co./Boston 637
360. Bessemer Trust 636
361. Hoisington Investment 635
362. Mellon-Pictet int'l 630
363. Seattle-First Nat'l Bank 627
364. Peters, Gamm & West 621
365. Bank of Calif./Merus Capital 620
366. Management Asset 612
367. Advanced Investment Mgmt. 610
368. Alex. Brown Investment 606
369. Texas American Investment 605
370. Qualivest Capital 603
371. Marine Investment 602
372. Harris, Greenhouse, Kutzel 600
373. Richmond Capital 600
374. Sasco Capital 600
375. Posthorn Global 596
376. Ashland Mgmt. 585
377. Oechsle Int'l 585
378. W.H. Reaves 580
379. Ward & Wissner Capital 577
380. Westwood Mgmt. 575
381. Valley Nat'l/Ariz. 574
382. Julius Baer Investment 571
383. McCullough, Andrews & Cappiello 560
384. Unity Mgmt. 560
385. Weaver C. Barksdale 557
386. Investment Advisors 556
387. First Maryland Asset 550
388. Karsten Realty 547
389. Security Capital 546
390. KR Capital 540
391. ABD Int'l Capital 539
392. Banc One Asset Mgmt. 535
393. Daniel S. Kampel 533
394. Third Nat'l Bank 526
395. David L. Babson 527
396. First Nat'l Bank/Omaha 525
397. Key Trust 525
398. Sterling Capital 523
399. MIG Realty 519
400. Liberty Life 513
401. Cramblit & Carney 512
402. Fiduciary Mgmt. Associates 511
403. Sound Shore Mgmt. 511
404. Ferguson & Wellman 510
405. Federated Investment Counseling 505
406. Roanoke Asset 504
407. AMR Investment 500
408. Bircher Real Estate 500
409. Cabot, Cabot & Forbes Realty 500
410. Capital Advisors 500
411. Estabrook Capital 500
412. Huntington Asset 500
413. Roll and Ross Asset 500
414. Southeastern Asset 500
415. Hanson Investment 499
416. Rice, Hall, James 490
417. SAFECO Asset Mgmt. 484
418. Van Deventer & Hoch 483
419. Bartlett 480
420. Axe-Houghton 479
421. Argus Investors' Counsel 476
422. Sirach/Flynn, Elvins Capital 476
423. Mathers 471
424. Wilkens & Nanovic 470
425. Fred Alger Asset 467
426. Kiene, Wooters & Associates 463
427. Banc Ohio Nat'l Bank 461
428. Meridian Investments 458
429. August-Am Cal 450
430. Daiwa Int'l Capital 448
431. Wood, Struthers & Winthrop 445
432. Campbell Advisors 442
433. Chicago Asset 442
434. Froley, Revy Investment 442
435. IDS Int'l 437
436. United Jersey Bank 424
437. Cutler 422
438. GeoCapital 412
439. Bowen, Hanes 410
440. Chicago Corp. 410
441. McMahan Real Estate 410
442. Lynch & Mayer 409
443. Disciplined Investment Advisors 400
444. Gofen & Glossberg 400
445. John McStay Investment 400
446. Mercator Asset Mgmt. 400
447. Rothschild 400
448. First Boston Asset 390
449. Eagle Asset 389
450. Delafield Asset 386
451. Capital Consultants 385
452. Colorado Capital 380
453. Investment Counsel 376
454. Amivest Capital 375
455. First Jersey Nat'l Bank 375
456. Leavy Investment 370
457. Keystone Investment 364
458. Fort Hill Investors 359
459. Smith Affiliated Capital 357
460. Western Reserve Capital 351
461. Capital Advisors 350
462. Dominion Trust 350
463. Haven Capital 350
464. Signet Asset 350
465. Chelsea Mgmt. 348
466. California First Bank 345
467. Dauphin Deposit Bank & Trust 341
468. Greenleaf Capital 340
469. Montag & Caldwell 334
470. Retirement System/Savings Inst. 332
471. Life Insurance/Ga. 330
472. Ohio Co. 330
473. Prescott Asset 329
474. PSM Investors 325
475. Fiduciary Mgmt./Milwaukee 324
476. Merchants Investment 321
477. Bigler/Crossroads 318
478. Brandywine Asset 318
479. Lomas Capital 315
480. Abbott Capital 312
481. Idaho First Nat'l Bank 310
482. Nicholas 310
483. Arnold Investment Counsel 300
484. Harris Bretall Sullivan & Smith 300
485. Magten Asset 300
486. Marine Bank 300
487. Parametric Portfolio 300
488. Petersen, Flynn & Dinsmore 300
489. Schroder Real Estate 300
490. Tallasi Mgmt. 300
491. Trevor Stewart Burton & Jacobsen 300
492. Grubb & Ellis Realty 295
493. Mount Vernon Associates 295
494. SBC Portfolio Mgmt. Int'l 283
495. Selected Financial 282
496. Mutual Service Life 281
497. Rittenhouse Financial 280
498. Securities Counselors/Iowa 277
499. Bank IV, Wichita 276
500. Bennett & Kahnweiler Realty 275

# A

## Abbott Capital Management

The Babson Building, 1 Market St., P.O. Box 81107, Wellesley Hills, Mass. 02181; (617) 235-1088

| | |
|---|---|
| Total assets managed | $312,000,000 |
| Tax-exempt assets managed | $312,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 9 |
| Types of accounts managed | CEG |
| No. of portfolio managers | 3 |
| Size of research staff | 3 |

Abbott Capital Management L.P. is a venture capital funds manager that uses a qualitative approach.

The firm uses in-depth analyses of the management teams to manage a 10- to 12-year venture capital partnership.

All assets Jan. 1 were in venture capital funds.

Raymond L. Held, general partner, is chief investment officer; Stanley E. Pratt, general partner, is client contact.

## ABD International Management Corp.

10 E. 53rd St., New York, N.Y. 10022; (212) 319-5020

| | |
|---|---|
| Total assets managed | $673,000,000 |
| Tax-exempt assets managed | $539,000,000 |
| International assets managed | $539,000,000 |
| Minimum separate account | $15,000,000 |
| Tax-exempt clients | 7 |
| Types of accounts managed | CG |
| No. of portfolio managers | 9 |
| Size of research staff | 79 |

ABD International Management Corp. is an international manager offering equity, fixed-income and balanced capabilities.

For equities, it takes an active approach to currencies and stock selection based on industry rotation worldwide and within markets. The currency decision is considered separately from asset allocation and security selection.

Its fixed-income approach uses interest rate anticipation, currency considerations, technical analysis and macroeconomic analysis regarding currency implications.

The asset mix Jan. 1 was 73% stocks, 12% bonds and 15% cash.

The parent company is Dresdner Bank AG.

Clients include GM, AT&T and Burlington Northern.

Wilhelm Heischmann is the chief investment officer; William Rutherford, president, is client contact.

## Abel/Noser Corp.

90 Broad St., 23rd Floor, New York, N.Y. 10004; (212) 344-2610

| | |
|---|---|
| Total assets managed | $200,000,000 |
| Tax-exempt assets managed | $200,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | C |
| No. of portfolio managers | 4 |
| Size of research staff | 4 |

Abel/Noser Corp. is an equity manager. The firm is also a manager of managers, responsible for an additional $30 million in externally managed funds.

Its equity approach is quantitative, emphasizing low price-earnings ratios. It invests in undervalued stocks with high earnings potential that recently reported earnings surprises using a ranking system with manual override when significant adverse information is published.

Eugene A. Noser Jr., president, is chief investment officer; Richard T. McSherry, executive vice president, is the client contact.

## Acquest Capital Management Inc.

300 E. Long Lake Road Suite 355; Bloomfield Hills, Mich. 48013; (313) 645-5130

| | |
|---|---|
| Total assets managed | $146,000,000 |
| Tax-exempt assets managed | $102,000,000 |
| Real estate assets managed | $102,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 6 |
| Types of accounts managed | CEJ |
| No. of portfolio managers | 3 |
| Size of research staff | 4 |

Acquest Capital Management Inc. is a real estate manager emphasizing product knowledge, market research, sophisticated financial analysis, development skills, management control and integrity.

Clients include Dow Chemical, Operating Engineers, Carpenters and Reinforced Ironworkers.

David G. Ong, president, is chief investment officer; Delores M. Hoenes, asset manager, is the client contact.

## The Adams Express Co.

7 St. Paul St., Baltimore, Md. 21202; (301) 752-5900

| | |
|---|---|
| Total assets managed | $427,000,000 |
| Tax-exempt assets managed | $3,000,000 |
| Minimum separate account | $5,000,000 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 4 |
| Size of research staff | 6 |

The Adams Express Co. is a defensively oriented equity manager, emphasizing quality growth at reasonable prices, based on Graham & Dodd principles. Its investment approach is risk-averse, with strong commitment to in-house research.

The firm follows 250 stocks closely and 500 generally; all of the research is generated internally.

W.D. MacCallan, chairman and chief executive officer, is chief investment officer. Monica C. Loh, vice president-investment advisory services, is client contact.

## Advanced Investment Management

2 Oliver Plaza Suite 2020, Pittsburgh, Pa. 15222; (412) 762-6369

| | |
|---|---|
| Total assets managed | $650,000,000 |
| Tax-exempt assets managed | $610,000,000 |
| Index funds managed | $170,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 44 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 5 |

Advanced Investment Management is an equity, fixed-income and balanced manager.

Its equity approach is based on quantitative strategies, with particular expertise in indexing and hedging to meet client risk tolerances. Its fixed-income approach is passive and hedged. Options, stock index futures and fixed-income futures are used.

It offers portfolio insurance, covering $300 million in tax-exempt assets.

The asset mix Jan. 1 was 80% stocks, 10% bonds, 5% cash and 5% derivative securities. As of the same date, $150 million was in equity index and $20 million in bond index funds.

The firm follows 300 stocks closely.

The parent is PNC Financial Corp.

Clients include Westinghouse Electric, USAir and Allegheny Ludlum.

J. Thomas Allen, president, is chief investment officer; Paul A. Blake III, marketing director, is client contact.

## Aegis Asset Management

1000 Quail St. Suite 220, Newport Beach, Calif. 92660; (714) 752-2120

| | |
|---|---|
| Total assets managed | $15,000,000 |
| Tax-exempt assets managed | $11,000,000 |
| Real estate assets managed | $800,000 |
| Minimum separate account | $150,000 |
| Tax-exempt clients | 30 |
| Types of accounts managed | CJ |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

Aegis Asset Management Inc., formerly Catanzarite-Zimberoff Asset Management Inc., is an equity, fixed-income and balanced manager.

Its equity approach combines Graham & Dodd analysis and growth stocks. It concentrates on the economic environment and specific fundamentals of a company. Its fixed-income approach uses interest rate anticipation.

Dorthea Zimberoff, executive vice president, is chief investment officer and the client contact.

## Aegis Capital Management

40 Wall St., New York, N.Y. 10005; (212) 363-8200

| | |
|---|---|
| Total assets managed | $50,000,000 |
| Tax-exempt assets managed | $17,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 3 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |

Aegis Capital Management Corp. is a fixed-income, yield enhancement and options and futures manager.

Its fixed-income approach combines dynamic yield enhancement and risk-controlled arbitrage. Futures and options are used to protect principal, create liquidity and enhance yields for U.S. Treasury portfolios.

All assets Jan. 1 were in fixed-income.

Clients include GMI Employees Credit Union, North Carolina Forestry and Selco Credit Union.

Jonathan B. Greenspan, chief trader, is chief investment officer. Thomas P. Zucosky, president, is client contact.

## Aetna Capital Management

145 King St. W., 14th Floor, Toronto, Ontario M5H 3T7; (416) 864-3880

| | |
|---|---|
| Total assets managed | $1,449,000,000 |
| Tax-exempt assets managed: | |
| Total | $408,000,000 |
| For subsidiaries of U.S. firms | $21,000,000 |
| Real estate assets managed | $108,000,000 |
| Non-North American assets | $8,000,000 |
| Dedicated assets | $17,000,000 |
| Minimum separate account | $4,000,000 |
| Tax-exempt clients | 45 |
| U.S. subsidiaries | 3 |
| Types of accounts managed | CGU |
| No. of portfolio managers | 4 |
| Size of research staff | 3 |

Aetna Capital Management Ltd., a Canadian firm, is an equity, fixed-income, balanced, real estate, U.S. equity and short-term money market manager.

Its equity approach emphasizes individual stock selection based on fundamental value considerations. About 20% to 25% of the decision is based on the economic and market environment.

Its fixed-income approach is to select the proper sector structure and term exposure within acceptable risk/reward limitations. They are market timers only to the extent of a 5% to 25% cash equivalent range.

For real estate, it offers closed-end funds for direct ownership of up to 75% of a property.

It follows 30 to 40 stocks closely and 100, generally; 20% of research is generated internally.

The parent company is Aetna Canada.

Michael A. Sandell, president, is chief investment officer and client contact.

## Aetna Life Insurance Co.

151 Farmington Ave., Hartford, Conn. 06156; (203) 273-0123

| | |
|---|---|
| Total assets managed | $64,496,000,000 |
| Tax-exempt assets managed: | |
| Total | $40,586,000,000 |
| Pooled accounts | $5,183,000,000 |
| Separate accounts | $3,260,000,000 |
| GICs | $12,356,000,000 |
| Annuities | $6,709,000,000 |
| Other | $13,078,000,000 |
| 401(k)/457 assets managed | $5,605,000,000 |
| 401(k)/457 clients | 390 |
| Real estate assets managed | $3,195,000,000 |
| International assets managed | $130,000,000 |
| Indexed assets managed | $148,000,000 |
| Dedicated assets managed | $120,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 2,091 |
| Types of accounts managed | CFJG |
| No. of portfolio managers | 9 |
| Size of research staff | 20 |

Aetna Life Insurance Co. is an equity, fixed-income, balanced, real estate, international and GIC manager.

Its equity approach emphasizes companies with positive future earnings momentum and superior relative p/e ratio targets. Passive management is offered.

Its active fixed-income approach uses sector analysis and is designed to control market risk while emphasizing cash flow and value to maximize total returns. Cash is used to govern duration within a prescribed band and generally is less than 25% of a portfolio. Options and stock index futures are used.

Its real estate approach includes strategic analysis, acquisition, aggressive property management and a disciplined sales program.

The separate account asset mix Jan. 1 was 34% stocks, 6% bonds, 21% cash, 24% equity real estate, 13% mortgages and 2% international; $122 million was in equity index funds and $25 million in bond indexed funds.

The parent company is Aetna Life and Casualty.

Philip R. Roberts, senior vice president, is chief investment officer; T. Jerald Moore, vice president, is client contact.

The data above include the assets of the following subsidiary.

● AETNA MULTINATIONAL ASSET MANAGEMENT LTD., with $159 million in tax-exempt assets, is an international manager whose equity approach emphasizes top-down country allocation with bottom-up stock selection to build a diversified portfolio, subject to predetermined risk parameters. Currency management is used to reduce volatility.

Philip R. Roberts, senior vice president, is chief investment officer; Thomas V. Scanlon, director, is client contact.

## Aetna Multinational Asset Management Ltd.

9-12 Basinghall St., London EC2V 5BQ, U.K.; 01-606-2595 or (203) 275-3711

See entry for AETNA LIFE INSURANCE CO.

## AFC Advisory Services Inc.

8555 16th St. Suite 701, Silver Spring, Md. 20910; (301) 589-5999

| | |
|---|---|
| Total assets managed | $30,000,000 |
| Tax-exempt assets managed | $9,000,000 |
| Real estate assets managed | 1,000,000 |
| Tax-exempt clients | 46 |
| Types of accounts managed | CJ |
| No. of portfolio managers | 1 |
| Size of research staff | 2 |

AFC Advisory Services Inc. is an equity, fixed-income and balanced manager.

Its equity approach specializes in market timing using trend analysis, with a focus on growth and emerging growth stocks.

Its fixed-income approach is based on reacting to changes in the direction of interest rates.

The firm follows 80 stocks closely and most of the Value Line stocks generally.

The parent company is American Financial Consultants Inc.

Barry L. Cliff is chief investment officer and client contact.

## Affirmative Investment Management Inc.

99 Wall St., 24th Floor, New York, N.Y. 10005; (212) 422-1710

| | |
|---|---|
| Total assets managed | $20,000,000 |
| Tax-exempt assets managed | $20,000,000 |
| Tax-exempt clients | 4 |
| Types of accounts managed | CF |
| No. of portfolio managers | 2 |
| Size of research staff | 4 |

Affirmative Investment Management Inc., an equity manager, uses sector rotation and an emphasis on low p/e stocks in its investment approach.

The firm follows 50 stocks closely and 125, generally; 50% of the research is generated internally.

The parent is DanBell Group Inc.

Clients include Chicago Laborer's Fund, District of Columbia Retirement Board and the NAACP.

Joseph N. Ancona is chief investment officer; Michael F. Dawson is client contact.

## AGEPASA

Plaza de las Cortes 4, 28014 Madrid, Spain; 341-429-00-96

| | |
|---|---|
| Total assets managed | $500,000,000 |
| Tax-exempt assets managed | $0 |
| No. of portfolio managers | 5 |
| Size of research staff | 6 |

AGEPASA, an international manager, specializes in the Spanish financial markets.

The firm uses a mix of fixed-income and equity, depending on investment objectives. Its equity approach emphasizes opportunities in low p/e stocks and emerging companies. Its fixed-income approach uses interest rate anticipation.

The firm follows 400 stocks closely; all research is generated internally.

Jose Luis Varez Fisa is chief investment officer; Jose Luis Diaz, director-international department, is client contact.

### 25 largest independent investment managers*

| Firm | $ millions |
|---|---|
| GE Investments | 19,900 |
| Mitchell Hutchins Inst'l | 18,427 |
| Boston Co. | 15,572 |
| Miller, Anderson, Sherrerd | 14,856 |
| Lehman Mgmt. | 11,920 |
| Oppenheimer Capital | 11,914 |
| Delaware Investment | 11,216 |
| INVESCO Capital | 10,602 |
| Scudder, Stevens & Clark | 10,495 |
| RCM Capital | 9,675 |
| Fischer, Francis, Trees | 9,200 |
| Fayez Sarofim | 9,160 |
| T. Rowe Price | 8,705 |
| Sanford C. Bernstein | 8,600 |
| Wellington Mgmt./TDP&L | 8,523 |
| Criterion Investment | 8,432 |
| Morgan Stanley Asset | 8,292 |
| Lazard Freres | 7,550 |
| Lincoln Capital | 7,389 |
| BEA Associates | 7,206 |
| Batterymarch Financial | 6,748 |
| Neuberger & Berman | 6,581 |
| Brown Brothers Harriman | 6,406 |
| Fidelity Mgmt. & Research | 6,000 |
| Capital Supervisors | 5,852 |
| **Total** | **249,220** |

*Excludes bank and insurance company subsidiaries.

## AgriVest

500 Winding Brook Drive, Glastonbury, Conn. 06033; (203) 659-3711

| | |
|---|---|
| Total assets managed | $450,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $3,000,000 |
| No. of portfolio managers | 3 |

AgriVest is a real estate manager that makes conservative, value-oriented investments, both equity and debt, in agricultural real estate in the major U.S. agricultural regions.

George E. Schwab, president, is chief investment officer; James B. McCandless, executive vice president, is client contact.

## AIG Global Investors

1 World Financial Center 19th Floor, New York, N.Y. 10281; (212) 266-0400

| | |
|---|---|
| Total assets managed | $8,000,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $10,000,000 |
| No. of portfolio managers | 9 |

AIG Global Investors is an equity, fixed-income, balanced, international and global balanced manager.

Its equity approach is top-down/bottom-up, with an emphasis on growth stocks. Its objective is above-average returns through asset allocation, diversification and selection.

Its fixed-income approach focuses on interest rate anticipation and forecasting currency movements. The firm looks for cyclical moves in interest rates over an economic cycle with a short-term trading viewpoint.

The parent company is American International Group.

Richard Hoffman, president, is chief investment officer and client contact.

## A I M Capital Management

11 Greenway Plaza Suite 1919, Houston, Texas 77046; (713) 626-1919

| | |
|---|---|
| Total assets managed | $9,720,000,000 |
| Tax-exempt assets managed | $131,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 7 |
| Types of accounts managed | CF |
| No. of portfolio managers | 4 |
| Size of research staff | 12 |

A I M Capital Management is an equity, fixed-income and balanced manager.

Its equity approach uses growth and emerging growth stocks that are monitored on the basis of earnings momentum and relative strength in the marketplace. Options are used.

In fixed income, the firm creates overdiversified portfolios loaded with lower-quality issues to capitalize on yield premiums and buys convertibles, seeking a high level of current income exceeding yields in the equity market.

All assets were in bonds Jan. 1.

Charles T. Bauer is chief investment officer; Gary T. Crum is client contact.

## Albion Management Group

Alta Lodge, Alta, Utah 84092; (801) 742-3500

| | |
|---|---|
| Total assets managed | $12,000,000 |
| Tax-exempt assets managed | $3,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 33 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Albion Management Group is an equity and balanced manager.

Its equity approach emphasizes growth stock, emerging growth stock and low p/e ratios. It seeks values overlooked by other investors. It looks for companies with a market niche, growth and earnings potential in products under development, hidden assets and other special situations. Options are used.

Its fixed-income approach relies on interest rate anticipation.

W. Toby Levitt, president, is chief investment officer; Heidi Mosburg, vice president, is client contact.

## Aldrich, Eastman & Waltch

265 Franklin St., Boston, Mass. 02110; (617) 439-9000

| | |
|---|---|
| Total assets managed | $2,700,000,000 |
| Tax-exempt assets managed | $2,700,000,000 |
| Real estate assets managed | 2,700,000,000 |
| Minimum separate account | $100,000,000 |
| Tax-exempt clients | 19 |
| Types of accounts managed | CEG |

Aldrich, Eastman & Waltch Inc. is a real estate manager.

Its approach is flexible and opportunistic, reflecting property fundamentals and current market conditions. It emphasizes adding value through active management of both the property and the capital structure of the investment.

The asset mix Jan. 1 was 95% equity real estate and 5% mortgages.

Clients include AT&T, GM, Iowa and Digital Equipment.

Thomas G. Eastman, principal, is chief investment officer; Robert J. Hannan is client contact.

## Fred Alger Asset Management Inc.

595 Market St., Suite 2050, San Francisco, Calif. 94105; (415) 882-9882

| | |
|---|---|
| Total assets managed | $467,000,000 |
| Tax-exempt assets managed | $467,000,000 |
| Real estate assets managed | $44,000,000 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients | 15 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |
| Size of research staff | 4 |

Fred Alger Asset Management Inc., a fixed-income manager, uses active duration management and sector positioning. The firm strives for consistent, above-average returns by avoiding extreme positions.

All research is generated internally.

The parent company is Fred Alger Management Corp.

Clients include Marine Carpenters, Jorgensen Steel and Varco International.

Fred Alger is chief investment officer; Brenda Teel, president, is client contact.

## Fred Alger Management Inc.

75 Maiden Lane, New York, N.Y. 10038; (212) 806-8800

| | |
|---|---|
| Total assets managed | $2,636,000,000 |
| Tax-exempt assets managed | $2,525,000,000 |
| 401(k)/457 assets managed | $58,000,000 |
| 401(k)/457 clients | 8 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 66 |
| Types of accounts managed | CF |
| No. of portfolio managers | 10 |
| Size of research staff | 20 |

Fred Alger Management Inc. is an equity, fixed-income, balanced, convertible securities and mutual fund manager.

Its bottom-up, growth stock approach focuses on companies experiencing positive life-cycle changes or high unit volume growth.

Its fixed-income approach is based on interest rate anticipation, sector analysis and credit research, seeking to achieve consistent, above-average returns through active maturity and sector selection.

The asset mix Jan. 1 was 84.8% stocks, 8.8% bonds and 6.4% cash.

The firm follows 75 stocks closely and 150, generally; all research is generated internally.

Fred Alger & Co. Inc. is the parent.

Clients include Alaska, Burlington Northern and Capital Cities/ABC.

Fred M. Alger, president and chairman, is chief investment officer; George J. Boggio, executive vice president, is client contact.

## Alliance Capital Management Corp.

1345 Avenue of the Americas, New York, N.Y. 10105; (212) 969-1000

| | |
|---|---|
| Total assets managed | $30,132,000,000 |
| Tax-exempt assets managed | $26,984,000,000 |
| Real estate assets managed | $1,568,000,000 |
| International assets managed | $368,000,000 |
| Index funds managed | $3,939,000,000 |
| Dedicated funds managed | $237,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 353 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 38 |
| Size of research staff | 18 |

Alliance Capital Management Corp. is an equity, fixed-income, balanced, international, convertible and venture capital manager.

It offers active and passive equity strategies. Its active approach uses emerging growth stocks and sector rotation to select stocks with two- to three-year relative earnings strength at an early stage and a reasonable price.

Its fixed-income approach relies heavily on sector analysis. It manages market risk by limiting duration deviations from the market. Value is added through heavy sector concentrations and opportunity trading. Passive strategies are offered. It uses options and financial futures.

The asset mix Jan. 1 was 75% stocks, 12% bonds, 4% cash, 8% mortgage-backed securities and 1% convertibles; $368 million was in foreign stocks and $3.939 billion in equity index funds.

The parent company is The Equitable Life Assurance Society of the United States.

Dave H. Williams is chief executive officer; Margaret M. Frankowski is client contact.

## Allstate Life Insurance Co.

Allstate Plaza South, Northbrook, Ill. 60062; (312) 402-5000

| | |
|---|---|
| Total assets managed | $5,589,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,331,000,000 |
| GICs | $894,000,000 |
| Annuities | $437,000,000 |
| 401(k)/457 assets managed | $270,000,000 |
| 401(k)/457 clients | 74 |
| Types of accounts managed | CEF |

Allstate Life Insurance Co. is a guaranteed investment contract manager.

As of Jan. 1, it held $639 million in single and $255 million in recurring GICs.

The parent is Allstate Insurance Co.

Clients include Whirlpool, Digital Equipment, Kellogg and MCA.

Louis G. Lower II is the chief investment officer; Henry Hsiang, director-group pension marketing, is the client contact.

## Alpine Capital Management

650 S. Cherry St. Suite 700, Denver, Colo. 80222; (303) 320-3944

| | |
|---|---|
| Total assets managed | $340,000,000 |
| Tax-exempt assets managed | $225,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 110 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 6 |
| Size of research staff | 4 |

Alpine Capital Management Corp. is an equity, fixed-income and balanced manager.

Its equity approach relies on sector rotation concentrating on asset allocation and industrial selection. Options are used in a covered call writing program. Its fixed-income approach is based on interest rate anticipation, investing in U.S. Treasury securities and high-quality, investment-grade corporate bonds.

Clients include Boulder Fire and Police, Mueller Electric and Pueblo of Tesuque.

James Morrill is chief investment officer; Jerry Shustrin, marketing director, is the client contact.

## Amalgamated Bank of New York

11-15 Union Square W., New York, N.Y. 10003; (212) 255-6200

| | |
|---|---|
| Total assets managed | $1,600,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,600,000,000 |
| Separate | $1,600,000,000 |
| Real estate assets managed | $100,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 119 |
| Types of accounts managed | J |
| No. of portfolio managers | 4 |
| Size of research staff | 4 |

Amalgamated Bank of New York is an active fixed-income manager, emphasizing interest rate anticipation.

It seeks to generate attractive current income, avoid losses and protect assets during troubled markets.

The asset mix Jan. 1 was 94% bonds and 6% cash. As of the same date, $100 million was in mortgage-backed securities.

Clients include the ILGWU, Hospital and Health Care Employees and the National Maritime Union.

Richard Cohen, first vice president, is chief investment officer and client contact.

## Amalgamated Trust & Savings Bank

1 W. Monroe St., Chicago, Ill. 60603; (312) 822-3173

| | |
|---|---|
| Total assets managed | $250,000,000 |
| Tax-exempt assets managed: | |
| Total | $202,000,000 |
| Separate | $202,000,000 |
| Real estate assets managed | $15,000,000 |
| Tax-exempt clients | 50 |
| Types of accounts managed | CGJ |
| Number of portfolio managers | 3 |

Amalgamated Trust & Savings Bank is an equity, fixed-income and balanced manager.

For equities, it uses sector rotation, Graham & Dodd and market timing, emphasizing value selection and a market-driven sell discipline. Options are used. Its fixed-income approach is passive and uses interest rate anticipation. Quality, current income and maturity balance are emphasized.

Michael M. Karnes, senior vice president, is chief investment officer and client contact.

## AMB Investments Inc.

345 California St., San Francisco, Calif. 94104; (415) 956-5100

| | |
|---|---|
| Total assets managed | $400,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $25,000,000 |
| No. of portfolio managers | 7 |

AMB Investments Inc., a real estate manager, emphasizes substantially leased industrial, retail and office properties between $5 million and $25 million in major markets in the West. It takes separate accounts only.

T. Robert Burke is the client contact.

## Ambs Investment Counsel

1501 McKay Tower, Grand Rapids, Mich. 49503; (616) 454-4535

| | |
|---|---|
| Total assets managed | $138,000,000 |
| Tax-exempt assets managed | $82,000,000 |
| Real estate assets managed | $5,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 24 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 2 |

Ambs Investment Counsel Inc. is an equity, fixed-income and balanced manager.

Its equity approach emphasizes growth stock and low p/e ratios. Its fixed-income approach focuses on quality issues with maturities offering the most attractive risk return over the near term.

The asset mix Jan. 1 was 36% stocks, 36% bonds, 22% cash and 6% mortgage-backed securities; $4.8 million was invested in mortgage-backed securities.

Clients include Christian School and Grand Transformers.

Keith Ambs is chief investment officer and client contact.

## American Agricultural Investment Management

631 E. Butterfield Road Suite 302, Lombard, Ill. 60148; (312) 810-0040

| | |
|---|---|
| Total assets managed | $14,000,000 |
| Tax-exempt assets managed | $7,000,000 |
| Real estate assets managed | $7,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | CJ |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

American Agricultural Investment Management Co. Inc., a farmland manager, selects prime income-producing farmland, diversified geographically and by commodity, in five selected agricultural areas.

Clients are Owens-Illinois and Teamsters Affiliates, Washington.

H. Joseph Bourn, president, is chief investment officer and client contact.

## American Asset Management Co.

200 Public Square, 26th Floor, Suite 3500, Cleveland, Ohio 44114-2301; (216) 781-8899

| | |
|---|---|
| Total assets managed | $408,000,000 |
| Tax-exempt assets managed | $196,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 86 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 3 |

American Asset Management Co. is an equity, fixed-income and balanced manager.

Its conservative equity approach emphasizes high-quality securities, selective diversification, low p/e ratios, above-average yields, earnings visibility and high asset values. Its fixed-income approach is based on interest rate anticipation and uses securities with maturities of less than 10 years.

Clients include Centerior Energy, Oglebay Norton and Wabash College.

Joseph H. Thomas, president, is chief investment officer and client contact.

## American Asset Management Co. Inc.

341 Madison Ave. 17th Floor, New York, N.Y. 10017; (212) 599-3003

| | |
|---|---|
| Total assets managed | $125,000,000 |
| Tax-exempt assets managed | $78,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 28 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 3 |

American Asset Management Co. Inc. is an equity, fixed-income and balanced manager.

Using sector rotation and growth and emerging growth stocks, its equity approach is value-oriented, sensitive to fundamental and psychological considerations.

Its fixed-income approach uses interest rate anticipation and sector analysis to ensure portfolio positions achieve incremental value.

Philip Putnam, managing director, is chief investment officer; George Kolodka, vice president, is client contact.

## American Capital Management Inc.

90 Broad St., New York, N.Y. 10004; (212) 344-3300

| | |
|---|---|
| Total assets managed | $41,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $500,000 |
| No. of portfolio managers | 2 |

American Capital Management Inc. is an equity and balanced manager.

Its equity approach emphasizes investments in smaller growth companies with accelerating earnings momentum that appear undervalued and average $130 million in revenue. It looks for growth, profitability and financial strength.

Its fixed-income approach uses interest rate anticipation; investments are tailored to secular movements of inflation and lending rates with emphasis on short or long term.

Luke P. LaValle Jr., president, is chief investment officer and client contact.

## American Express Investment Division

American Express Tower, World Financial Center, New York, N.Y. 10285-4815

| | |
|---|---|
| Total assets managed | $3,300,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $50,000,000 |
| No. of portfolio managers | 3 |
| Size of research staff | 4 |

American Express Investment Division is a fixed-income, futures and options manager.

Its investment approach uses passive and interest rate anticipation approaches, usually remaining fully invested. Options and fixed-income futures are used.

The parent is American Express Co.

H.L. Clark Jr., executive vice president, is chief investment officer; R.P. Rank, senior vice president, is client contact.

## American Fund Advisors

50 Broad St., New York, N.Y. 10004; (212) 482-8100

| | |
|---|---|
| Total assets managed | $138,000,000 |
| Tax-exempt assets managed | $22,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 9 |
| Types of accounts managed | C |
| No. of portfolio managers | 3 |

American Fund Advisors Inc. is an equity and balanced manager.

Its equity approach emphasizes emerging growth stocks analyzed through Graham & Dodd principles. It has a value orientation, emphasizing technology and aviation. The focus is on cash flow and margin normalization. Options are used.

Its fixed-income approach is passive; investments are a function of objectives in balanced accounts.

Clients include ITT, Continental Telephone and Western Union.

Barry J. Gordon is chief investment officer; Corinne Ehrlich is client contact.

## American National Bank & Trust

Fifth and Main Streets, St. Paul, Minn. 55101; (612) 298-6004

| | |
|---|---|
| Total assets managed | $235,000,000 |
| Tax-exempt assets managed: | |
| Total | $92,000,000 |
| Commingled | $60,000,000 |
| Separate | $32,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 86 |
| Separate | 16 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 2 |

American National Bank & Trust is an equity, fixed-income and balanced manager.

Its equity approach is a value, low p/e, high-dividend style that is somewhat contrarian and uses disciplined computer-based management. It uses Trinity Investment Management to assist in equity management. Its fixed-income approach uses interest rate anticipation.

The parent is American Bancorporation.

John P. Klett is chief investment officer and client contact.

## American National Bank & Trust Co. of Chicago

33 N. LaSalle St., Chicago, Ill. 60690; (312) 661-5586

| | |
|---|---|
| Total assets managed | $10,320,000,000 |
| Tax-exempt assets managed: | |
| Total | $9,763,000,000 |
| Commingled | $7,320,000,000 |
| Separate | $2,443,000,000 |
| 401(k)/457 assets managed | $500,000,000 |
| 401(k)/457 clients | 50 |
| International assets managed | $128,000,000 |
| Indexed assets managed | $7,800,000,000 |
| Tax-exempt clients: | |
| Commingled | 250 |
| Separate | 20 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 9 |
| Size of research staff | 11 |

American National Bank & Trust Co.

of Chicago is an equity, fixed-income, balanced and international manager.

Its equity approach offers broad diversification through passive management and uses enhanced index capabilities. Stock index futures are used.

Its fixed-income approach is passive, and duplicates the equity approach.

The asset mix Jan. 1 was 82% stocks, 14% bonds and 4% cash. As of the same date, the bank had $128 million in foreign stocks, $400 million in bond index funds and $7.4 billion in equity index funds.

Clients include NYNEX and Illinois Teachers.

The parent company is American National Corp.

John R. Tilton is chief investment officer; Ken Sobolewski, national sales director, is client contact.

## American Pension Management

177 Soundview Ave., White Plains, N.Y. 10602; (914) 428-3378

| | |
|---|---|
| Total assets managed | $137,000,000 |
| Tax-exempt assets managed | $137,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 9 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

American Pension Management is an equity, fixed-income and balanced manager.

Its equity approach is quantitative, using Graham & Dodd and market timing techniques with growth and emerging growth stocks. Its fixed-income approach is passive.

Options, stock index futures and fixed-income futures are used.

The firm follows 268 stocks closely and 2,500, generally. All of the research is generated internally.

Jack R. Orben is the chief investment officer and the client contact.

## Amerindo U.S. Advisors Inc.

60 E. Sir Francis Drake Blvd., Suite 300, Larkspur, Calif. 94939; (415) 461-5121

| | |
|---|---|
| Total assets managed | $275,000,000 |
| Tax-exempt assets managed | $45,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 3 |
| Types of accounts managed | CE |
| No. of portfolio managers | 1 |
| Size of research staff | 4 |

Amerindo U.S. Advisors Inc. is a small-cap equities manager.

Its emerging growth equity approach focuses on companies at the forefront of applied science and technology. A top-down approach determines the degree of commitment to the sector while original fundamental research is used to identify attractive companies.

Albert W. Vilar, president, is chief investment officer. The client contact is James C. Vogelzang, Vogelzang & Associates Inc., 600 17th St., Suite 2325S, Denver, Colo., 80202; (303) 629-1900.

## AmeriTrust Co.

900 Euclid Ave., Cleveland, Ohio 44101; (216) 687-4089

| | |
|---|---|
| Total assets managed | $10,687,000,000 |
| Tax-exempt assets managed: | |
| Total | $6,438,000,000 |
| Commingled | $891,000,000 |
| Separate | $4,225,000,000 |
| 401(k)/457 assets managed | $1,945,000,000 |
| 401(k)/457 clients | 92 |
| Real estate assets managed | $27,000,000 |
| Dedicated assets managed | $82,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients: | |
| Commingled | 200 |
| Separate | 196 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 11 |
| Size of research staff | 11 |

AmeriTrust Co. is an equity, fixed-income, balanced, real estate and convertible securities manager.

Its value-driven equity approach uses broadly diversified portfolios consisting of low p/e issues when dividend return and fundamental value will provide superior long-term returns while limiting downside risk. Its fixed-income approach is based upon interest rate anticipation, and stresses quality and maturity structure so portfolios will generally have low volatility.

Its real estate approach provides current yield plus protection against inflation. Property selections are based on the adequacy of the current return.

The asset mix Jan. 1 was 62% stocks, 21% bonds, 8% cash and 9% convertible securities; it had $11 million in equity real estate and $16 million in mortgage-backed securities.

The parent company is AmeriTrust Corp.

Richard C. Hyde is executive vice president and chief investment officer; Gary W. Queen, senior vice president, is client contact.

## Amherst Investment Management Co.

1414 Main St., Springfield, Mass. 01144; (413) 784-6804

| | |
|---|---|
| Total assets managed | $1,000,000,000 |
| Tax-exempt assets managed | $81,000,000 |
| Real estate assets managed | 16,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 1 |
| Types of accounts managed | C |
| No. of portfolio managers | 3 |
| Size of research staff | 5 |

Amherst Investment Management Co. is an equity, fixed-income and balanced manager.

Its equity approach combines MPT-based valuation models with fundamental and relative p/e analysis. Its fixed-income approach uses sector analysis. It invests in equity securities of REIT companies. Options are used.

The parent company is Monarch Capital Corp.

George Siguler, vice chairman, is chief investment officer; Arthur C. Gudikunst, senior vice president, is client contact.

## Amivest Capital Management

767 Fifth Ave., 27th Floor, New York, N.Y. 10153; (212) 688-6667

| | |
|---|---|
| Total assets managed | $375,000,000 |
| Tax-exempt assets managed | $375,000,000 |
| Real estate assets managed | $22,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 30 |
| Types of accounts managed | CEJ |
| No. of portfolio managers | 3 |

Amivest Capital Management is an equity, fixed-income and balanced manager.

Its growth-stock equity approach uses Graham & Dodd analysis and low p/e ratios, with asset allocation and sector weights determined by the economic and investment outlook. Its fixed-income approach uses interest rate anticipation and sector analysis.

As of Jan. 1 $22 million was in mortgage-backed securities.

The parent company is Amivest Corp.

Philip A. Cannistraro, executive vice president, is chief investment officer; Mark C. Dollard, senior vice president, is client contact.

## AMR Investment Services

P.O. Box 619616, Dallas-Fort Worth Airport, Texas 75261-9616; (817) 355-3514

| | |
|---|---|
| Total assets managed | $500,000,000 |
| Tax-exempt assets managed | $500,000,000 |
| International assets managed | $200,000,000 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients | 7 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 7 |
| Size of research staff | 3 |

AMR Investment Services Inc. is an equity, fixed income, balanced and short-term cash portfolio manager.

The firm follows a low p/e, low price-to-book value approach using seven of American Airlines' outside investment managers.

Its fixed-income approach uses sector analysis, stressing income requirements and low volatility.

The asset mix Jan. 1 was 40% stocks, 30% bonds and 30% cash. As of the same date, the firm had $200 million in foreign cash.

The parent company is AMR Corp.

Clients include Sky Chefs and First Southern Trust.

William F. Quinn, president, is chief investment officer; Nathan O. Finke, vice president-marketing, is client contact.

## AmSouth Bank

P.O. Box 11426, Birmingham, Ala. 35202; (205) 326-5512

| | |
|---|---|
| Total assets managed | $4,500,000,000 |
| Tax-exempt assets managed: | |
| Total | $2,200,000,000 |
| Commingled | $300,000,000 |
| Separate | $1,900,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients: | |
| Commingled | 800 |
| Separate | 200 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 16 |

AmSouth Bank is an equity, fixed-income and balanced manager.

Its equity approach concentrates on undervalued, out-of-favor stocks, focusing on low p/e and using Graham & Dodd analysis. The bank seeks to capitalize on cyclical movements in stock prices and target stocks that are mispriced relative to their long-term value. Its fixed-income approach uses interest rate anticipation, capitalizing on broad, cyclical movements.

The asset mix Jan. 1 was 40% stocks, 50% bonds and 10% cash.

The firm follows 200 stocks closely and 1,000 generally; 35% of research is generated internally.

John H. Goff Jr., senior vice president and senior trust investment officer, is chief investment officer; James M. Groom, trust investment officer, is client contact.

## Analytic Investment Management Inc.

2222 Martin St., Suite 230, Irvine, Calif. 92715; (714) 833-0294

| | |
|---|---|
| Total assets managed | $1,169,000,000 |
| Tax-exempt assets managed | $1,088,000,000 |
| 401(k)/457 assets managed | $1,000,000 |
| 401(k)/457 clients | 2 |
| Real estate assets managed | $11,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 32 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 9 |
| Size of research staff | 3 |

Analytic Investment Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach is quantitative and uses growth stocks. The firm constructs diversified portfolios, hedging them with options, futures and convertible securities to reduce market volatility and increase long-term return.

Its fixed-income approach uses portfolios of federal government issues and related derivative securities, including futures, options and options on futures. Hedged positions are used to limit risk and boost return.

The asset mix Jan. 1 was 92% stocks, 4% bonds, 3% cash and 1% mortgage-backed securities; $11 million was in mortgaged-backed securities. The firm follows 260 stocks closely and 593 generally; all research is generated internally.

The parent company is United Asset Management.

Clients include Eastman Kodak, Central Laborers, Houston Police and Vanderbilt University.

Sheen T. Kassouf is the chief investment officer; Kevin Hamilton is the client contact.

## Anchor Capital Advisors Inc.

1 Post Office Square, Boston, Mass. 02109; (617) 423-9336

| | |
|---|---|
| Total assets managed | $170,000,000 |
| Tax-exempt assets managed | $107,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 78 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

Anchor Capital Advisors Inc. is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented using low p/e and Graham & Dodd principles to analyze the market. Emphasis is given to deep value securities and reduction of downside risk.

Its fixed-income approach combines sector analysis and interest rate anticipation.

Clients include Rhode Island Painters, Providence YMCA and Massachusetts State Carpenters.

Mark V. Rickabaugh is chief investment officer; William P. Rice, president, is client contact.

## Anhalt/O'Connell Inc.

345 S. Figueroa St., Suite 303, Los Angeles, Calif. 90071; (213) 622-0066

| | |
|---|---|
| Total assets managed | $858,000,000 |
| Tax-exempt assets managed | $843,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 8 |
| Types of accounts managed | CG |
| No. of portfolio managers | 2 |

Anhalt/O'Connell Inc. is a fixed-income manager.

Its approach uses fundamental data to identify interest rate trends and appropriate maturities. Put and call options are used as enhancements. Its active style uses Treasury securities exclusively.

All assets were invested in fixed income Jan. 1.

All research is generated internally.

Paul Anhalt and Michael O'Connell, principals, are the chief investment officers; Ross B. McAdam, managing director, is client contact.

## Argus Investment Management

330 E. Canon Perdido Suite C, Santa Barbara, Calif. 93101; (805) 963-3558

| | |
|---|---|
| Total assets managed | $134,000,000 |
| Tax-exempt assets managed | $70,000,000 |
| International assets managed | $5,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 49 |
| Types of accounts managed | CF |
| No. of portfolio managers | 3 |
| Size of research staff | 1 |

Argus Investment Management is an equity and balanced manager.

Its equity approach is geared toward fundamental value. It seeks signs of opportunities such as insider accumulation, favorable technical profiles and modest institutional ownership.

Its fixed-income approach anticipates trends in interest rates, using U.S. government and high-quality corporate securities.

James Alphier and Jon Bull are chief investment officers; Timothy R. Alward is client contact.

## Argus Investors' Counsel

17 Battery Place, 18th Floor, New York, N.Y. 10004; (212) 425-7500

| | |
|---|---|
| Total assets managed | $526,000,000 |
| Tax-exempt assets managed | $476,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 12 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 2 |
| Size of research staff | 20 |

Argus Investors' Counsel is an equity, fixed-income and balanced manager.

Its equity approach is highly diversified, oriented toward large-cap and quality stocks. It has a strong buy/sell discipline. Options are used.

Its fixed-income approach uses quality bonds with diversified, well-spaced maturities. Average maturity is 14 to 18 years.

The parent company is Argus Research Group.

Clients include United Mineworkers and the Ritter Foundation.

Herman I. Roseman, president, is chief investment officer; Michael J. Bonner, director of marketing, is client contact.

## Ariel Capital Management

307 N. Michigan Ave., Suite 2014, Chicago, Ill. 60601; (312) 726-0140

| | |
|---|---|
| Total assets managed | $263,000,000 |
| Tax-exempt assets managed | $255,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 37 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 1 |
| Size of research staff | 2 |

Ariel Capital Management Inc. is an equity manager.

Its approach uses Graham & Dodd analysis to seek undervalued companies with p/es of less than 11 and the potential to grow at 15% or more annually.

Clients include Detroit Police and Fire, University of Michigan and Kraft Foundation.

John W. Rogers Jr., president, is chief investment officer; Darice Wright, senior vice president, is client contact.

## Ariston Capital Management

12301 N.E. 10th Place Suite 250, Bellevue, Wash. 98005; (206) 454-1600

| | |
|---|---|
| Total assets managed | $42,000,000 |
| Tax-exempt assets managed | $28,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 54 |
| Types of accounts managed | CFG |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

Ariston Capital Management Corp. is a balanced and convertible securities manager.

Its investment approach combines growth and emerging growth and low p/e stocks with sector rotation and long-term market forecasting. The firm uses undervalued convertibles as a low-risk alternative to the equity market. Its fixed-income approach is driven by interest rate anticipation.

Richard B. Russell, president, is chief investment officer; Frederick L. Denman is client contact.

## Arnold Investment Counsel

700 N. Water St., Milwaukee, Wis. 53202; (414) 271-2726

| | |
|---|---|
| Total assets managed | $450,000,000 |
| Tax-exempt assets managed | $300,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 200 |
| Types of accounts managed | CEF |
| Size of research staff | 6 |

Arnold Investment Counsel Inc. is an equity, fixed-income and balanced manager.

For equity investment, it takes a patient, disciplined, low-risk, contrarian approach to undervalued, large-cap, liquid issues. Cash is raised when necessary.

Its fixed-income commitments vary with the firm's perception of changes in inflation. Investments are limited to highly liquid, investment-grade securities.

James R. Arnold Sr. is chief investment officer and client contact.

## Aronson & Fogler

230 S. Broad St., 20th Floor Philadelphia, Pa. 19102; (215) 546-7500

| | |
|---|---|
| Total assets managed | $150,000,000 |
| Tax-exempt assets managed | $150,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 5 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 4 |

Aronson & Fogler is an equity manager following a value-oriented, quantitative and super-diversified approach. The model-driven philosophy emphasizes classical security analysis; decision-making is computerized with the goal of pure stock selection.

All assets were in stocks Jan. 1.

The firm follows 1,500 stocks closely and 6,500, generally.

Clients include the University of Southern California, The Common Fund, Bell Atlantic and Agway.

Theodore R. Aronson and H. Russell Fogler are the chief investment officers. Mr. Aronson is the client contact.

## ASB Capital Management

655 15th St. N.W. Suite 800, Washington, D.C. 20005; (202) 383-6395

| | |
|---|---|
| Total assets managed | $5,474,000,000 |
| Tax-exempt assets managed | $4,983,000,000 |
| 401(k)/457 assets managed | $17,000,000 |
| 401(k)/457 clients | 2 |
| Real estate assets managed | $514,000,000 |
| Index funds managed | $423,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 379 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 13 |
| Size of research staff | 9 |

ASB Capital Management Inc. is an equity, fixed-income, balanced, GIC and cash manager.

Its equity approach is oriented toward relative value; attractive securities are identified by quantitative ranking of value and fundamental factors. Sector emphasis is made accordingly.

Its fixed-income approach combines interest rate anticipation, maturity and sector shifts, swaps and arbitrage and timely selection of issues.

For real estate, the firm invests in high-quality, income-producing proper-

ties constructed with union labor, through participating and covertible mortgages and joint ventures.

The asset mix Jan. 1 was 47% stocks, 34% bonds, 10% cash, 3% equity real estate and 6% mortgage-backed securities. As of the same date, $423 million was in equity indexed funds.

The parent is American Security Corp.

Terence W. Collins is president and chief investment officer; Jesse L. Sternberger, vice president and director of marketing, is the client contact.

### Ashfield/Pacific Asset Management

750 Battery St. Suite 700, San Francisco, Calif. 94111; (415) 391-4747

| | |
|---|---|
| Total assets managed | $472,000,000 |
| Tax-exempt assets managed | $191,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 46 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 5 |
| Size of research staff | 5 |

Ashfield/Pacific Asset Management is an equity, fixed-income and balanced manager.

Its equity approach emphasizes growth stocks with investments concentrated in small- and midsize companies with accelerating earnings trends and consistently high returns on assets and equity. Buy/sell disciplines emphasize relative p/e ratios.

Its fixed-income approach is passive and based upon relative value in attractive market sectors. Strategy emphasizes economic and interest rate cycles, liquidity and the yield curve.

J. Stephen Thornborrow is the chief investment officer; J. Stephen Lauck and Andrew F. Mathieson are the client contacts.

### Ashland Management

26 Broadway, New York, N.Y. 10004; (212) 425-2803

| | |
|---|---|
| Total assets managed | $718,000,000 |
| Tax-exempt assets managed | $585,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 105 |
| Types of accounts managed | CEFJG |

Ashland Management, an equity manager, seeks quality growth, low p/e stocks. It uses Graham & Dodd analysis.

The asset mix Jan. 1 was 96% stocks and 4% cash.

The firm follows 90 stocks closely and 1,200, generally; 90% of the research is generated internally.

Charles C. Hickox is the chief investment officer; Minot Amory, director, is the client contact.

### Associated Capital Investors

555 California St., San Francisco, Calif. 94104; (415) 393-0323

| | |
|---|---|
| Total assets managed | $5,000,000,000 |
| Tax-exempt assets managed | $3,375,000,000 |
| 401(k)/457 assets managed | $15,000,000 |
| 401(k)/457 clients | 4 |
| International assets managed | $5,000,000 |
| Index funds managed | $240,000,000 |
| Dedicated funds managed | $220,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 55 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 10 |

Associated Capital Investors, formerly BA Investment Management Corp., is an equity, fixed-income, asset allocation and money market manager. Its equity approach emphasizes value-oriented situations with above-average S&P total expected return potential with a bias toward companies that exhibit superior growth and profit characteristics.

Its active fixed-income management consists of moderate adjustments in duration accompanied by an emphasis in security and sector shifts. For passive accounts, it offers dedication, immunization and index programs; it is based on interest rate anticipation.

Money market and limited risk management targets preservation of capital through credit quality control, adding value within sector and maturity shifts.

Options, stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 50% stocks and 50% bonds.

Monarch Capital Corp. has a majority interest in the firm.

Thomas B. Kelley is chairman and chief investment officer; Richard A. Frodsham, senior vice president/director of marketing, is client contact.

### Astrop Advisory Corp.

5 Piedmont Center Suite 417, Atlanta, Ga. 30305; (404) 239-0707 or (800) 237-7073

| | |
|---|---|
| Total assets managed | $547,000,000 |
| Tax-exempt assets managed | $204,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 36 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 4 |

Astrop Advisory Corp. is an equity, fixed-income and balanced manager.

Its equity approach focuses on two styles: total return, emphasizing strong fundamental and technical patterns; and growth, focusing on high-quality, midsize issues. Two no-load institutional mutual funds are sponsored.

The fixed-income approach is pas-

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*Equity Management*

*Lee C. Garcia*
*Managing Director*

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sive, focusing on interest rate anticipation.

Clients include CIBA-GEIGY, Georgia-Pacific and Atlanta University.

H. Eugene Caldwell, president, is chief investment officer; Dixie P. Anderson, vice chairman and managing director, is client contact.

### Atalanta/Sosnoff Capital

499 Park Ave., New York, N.Y. 10022; (212) 755-2800

| | |
|---|---|
| Total assets managed | $3,990,000,000 |
| Tax-exempt assets managed | $3,821,000,000 |
| 401(k)/457 assets managed | $4,000,000 |
| 401(k)/457 clients | 1 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 122 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

Atalanta/Sosnoff Capital Corp. is an equity and balanced manager.

Its equity approach combines sector rotation and low p/e stocks. Managing portfolios in a pragmatic and disciplined way, it focuses on achieving absolute rates of return.

Its fixed-income approach uses interest rate anticipation and sector analysis. The firm avoids concentration in long maturities.

The asset mix Jan. 1 was 59% stocks, 23% bonds and 18% cash.

It follows 150 stocks closely and 600, generally; 80% of research is generated internally.

Clients include Levi Strauss, City of Philadelphia, Kraft and Tektronix.

Martin T. Sosnoff is chief investment officer; Suzanne Lawrence, marketing administrator, is client contact.

### Atlanta Capital Management

1360 Peachtree St. Suite 1600, Atlanta, Ga., 30309; (404) 876-9411

| | |
|---|---|
| Total assets managed | $1,371,000,000 |
| Tax-exempt assets managed | $1,231,000,000 |
| Real estate assets managed | $61,000,000 |
| Dedicated funds managed | $20,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 44 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 9 |

Atlanta Capital Management Co. is an equity, fixed-income and balanced manager.

Its equity approach focuses on high-quality companies with above-average profitability and a growing stream of earnings. The firm uses a disciplined approach for comparing company worth to stock price.

Its approach to fixed income is highly disciplined, using A or better securities and maturity optimization, which uses a set of interest rate forecasts.

The asset mix Jan. 1 was 63% stocks, 27% bonds, 5% cash and 5% mortgage-backed securities.

The firm follows 150 stocks closely and 400, generally; 70% of research is generated internally.

Clients include American Airlines, Northeast Utilities, Miami and Procter & Gamble.

Frederick L. Muller, president, is the chief investment officer; R.M. Varn, managing director, is the client contact.

### August-Am Cal Advisors Inc.

4730 Woodman Ave. Suite 220, Sherman Oaks, Calif. 91423; (818) 990-3250

| | |
|---|---|
| Total assets managed | $450,000,000 |
| Tax-exempt assets managed | $450,000,000 |
| Real estate assets managed | 450,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 8 |
| Types of accounts managed | J |
| No. of portfolio managers | 5 |
| Size of research staff | 3 |

August-Am Cal Advisors Inc., formerly Am Cal Co., is a real estate manager.

Its investment approach emphasizes cash-on-cash return to exceed 12-year Treasuries and 150 basis points with preservation of capital through appreciation in value to exceed the inflation rate by 3%.

The parent is August Financial Corp.

Clients include Hawaii Masons; Albuquerque Pipes; Sheet Metal Workers of Southern California, Arizona and Nevada; and Southern Electrical.

James B. McKenna is chief investment officer; S.Q. Dellagrotta is client contact.

### Avatar Associates

900 Third Ave., New York, N.Y., 10022; (212) 753-7710

| | |
|---|---|
| Total assets managed | $1,400,000,000 |
| Tax-exempt assets managed | $1,000,000,000 |
| 401(k)/457 assets managed | $50,000,000 |
| 401(k)/457 clients | 3 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 80 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 5 |
| Size of research staff | 4 |

Avatar Associates is an equity and balanced manager.

Its equity approach is active asset allocation; the firm alters the portfolio mix to reflect changes in stock market risk. The primary objective is capital preservation during falling markets. Accounts use individual stocks and cash for defensive management; an index fund and cash fund for "swing" management; or stock index futures only to hedge other equity assets.

The fixed-income portions of balanced accounts use primarily U.S. government securities of short to intermediate maturities; maturities are based on interest rate trends.

The asset mix Jan. 1 was 85% stocks and 15% cash.

It follows 80 stocks closely and 150, generally; 80% of equity research and 100% of asset mix research is generated internally.

Clients include K mart, Chrysler and Public Service Electric and Gas.

Edward S. Babbit Jr., president, is chief investment officer; Bruce L. Poliquin, vice president, is client contact.

### Axe-Houghton Management

Axe Castle, 400 Benedict Ave., Tarrytown, N.Y. 10591; (914) 631-8131

| | |
|---|---|
| Total assets managed | $1,274,000,000 |
| Tax-exempt assets managed | $479,000,000 |
| International assets managed | $107,000,000 |
| Index funds managed | $343,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 16 |
| Types of accounts managed | CFJG |
| No. of portfolio managers | 5 |
| Size of research staff | 8 |

Axe-Houghton Management Inc. is an equity, fixed-income, balanced, international, GIC and index fund manager.

It offers both active and passive equity approaches. Its active approach emphasizes low p/e, growth and emerging growth stocks and sector rotation. It also offers domestic and international indexed equity management. Options and stock index futures are used.

In fixed-income, interest rate risk exposure is based on a multiscenario interest rate outlook; credit risk exposure is based on the size of available quality spreads and analysis of individual credits.

The parent is USF&G Corp.

John L. Schroeder is the chief investment officer; Stephen J. Darby Jr. is the client contact.

### J.H. Ayres & Co. Inc.

2016 Condor St., Colorado Springs, Colo. 80909; (303) 635-1414

| | |
|---|---|
| Total assets managed | $1,800,000,000 |
| Tax-exempt assets managed | $1,800,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 160 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

J.H. Ayres & Co. Inc. is a mutual fund manager.

For equities, the firm employs monetary timing based on changes in the Federal Reserve's monetary policy. Assets are rotated between equity mutual funds and money market mutual funds. Using interest rate anticipation and bond timing, fixed-income assets are shifted between bond mutual funds and money market mutual funds.

As of Jan. 1, the assets were 100% cash.

James H. Ayres, president, is chief investment officer and client contact.

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Master trust: Aug. 22.

## B

### David L. Babson & Co. Inc.

1 Memorial Drive, Cambridge, Mass. 02142; (617) 225-3800

| | |
|---|---|
| Total assets managed | $2,223,000,000 |
| Tax-exempt assets managed | $527,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 82 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 15 |
| Size of research staff | 6 |

David L. Babson & Co. Inc. is an equity, fixed-income and balanced manager.

Its equity approach emphasizes growth and emerging growth stocks. Emphasis is on selection of reasonably valued, high-quality companies with the potential for above-average earnings growth.

Its fixed-income approach uses sector analysis, emphasizing high-grade, special value bonds, controlled maturity risk and active trading. Portfolios are actively managed to maximize total return.

The asset mix Jan. 1 was 65% stocks, 30% bonds and 5% cash.

The firm follows 200 stocks closely and 625, generally; 85% of research is generated internally.

Peter C. Thompson, president, is chief investment officer and client contact.

### Badgley & Phelps Inc.

1301 Fifth Ave. 3206 Rainier Tower, Seattle, Wash. 98101; (206) 623-6172

| | |
|---|---|
| Total assets managed | $400,000,000 |
| Tax-exempt assets managed | $100,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 60 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 7 |

Badgley & Phelps Inc. is an equity, fixed-income and balanced manager.

Its equity approach is focused on high-quality growth stocks. Its fixed-income approach is passive, using a stepped schedule of high-quality bonds coming due each year to be reinvested at current rates.

The firm follows 80 stocks closely and 200, generally.

Warren Bell is chief investment officer; Pat Sullivan and Kevin Callaghan are client contacts.

### Julius Baer Investment Management Inc.

330 Madison Ave., New York, N.Y. 10017; (212) 949-9055

| | |
|---|---|
| Total assets managed | $571,000,000 |
| Tax-exempt assets managed | $571,000,000 |
| International assets managed | $571,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 11 |
| Types of accounts managed | CFG |
| No. of portfolio managers | 5 |
| Size of research staff | 28 |

Julius Baer Investment Management Inc. is an international manager.

Its equity approach uses growth stocks and sector rotation. Country allocations are based on expected total return, and stock selection emphasizes large, stable growth companies and industry trends.

In fixed income, it uses interest rate anticipation, sector analysis and currency mix. Currency weightings are based on total return forecasts, with or without hedging. Bond selection emphasizes government and high-quality issues with medium maturities.

The asset mix Jan. 1 was 10% stocks and 90% bonds.

The parent is Baer Holding Ltd.

Clients include Owens-Illinois and Kansas Public Employees.

Peter Widmer is chief investment officer; Jay Dirnberger is client contact.

### Ballard Blehl & Kaiser

2755 Campus Drive, San Mateo, Calif. 94403; (415) 571-5800

| | |
|---|---|
| Total assets managed | $300,000,000 |
| Tax-exempt assets managed | $122,000,000 |
| Minimum separate account | $2,000,000 |

**25 largest banks and trust companies* ranked by tax-exempt assets**

| Firm | $ millions |
|---|---|
| Bankers Trust | 52,807 |
| J.P. Morgan | 51,115 |
| Wells Fargo | 50,716 |
| Mellon Bank | 42,230 |
| State Street Bank | 26,930 |
| Citicorp | 17,246 |
| Capital Group | 16,968 |
| Chase | 15,900 |
| Northern Trust | 13,168 |
| Fiduciary Trust | 12,744 |
| Trust Co./West | 10,306 |
| Chemical | 10,039 |
| First RepublicBank | 9,932 |
| American Nat'l/Chicago | 9,763 |
| First Chicago | 9,245 |
| Harris Trust & Savings | 8,793 |
| First Interstate | 8,094 |
| Security Pacific | 6,885 |
| AmeriTrust | 6,438 |
| Boatmen's Nat'l/St. Louis | 5,711 |
| Irving Trust | 5,341 |
| Fidelity Mgmt. Trust | 5,206 |
| ASB | 4,983 |
| First Bank System | 4,926 |
| PNC | 4,911 |
| **Total** | **410,457** |

*Includes subsidiaries' assets

| | |
|---|---|
| Tax-exempt clients | 35 |
| Types of accounts managed | CFJ |
| No. of portfolio managers | 6 |
| Size of research staff | 4 |

Baillard Biehl & Kaiser is a balanced, international manager and tactical asset allocation manager.

Investment management is integrated with the asset allocation modeling. The equity approach uses sector rotation and low p/e stocks. Its fixed-income approach uses interest rate anticipation. Portfolios hold high-quality corporate bonds and Treasuries with a 20-year average maturity.

In addition to the tax-exempt assets listed above, the firm has $28 million directed to other real estate, international and short-term managers as part of the tactical asset allocation strategy.

Ronald W. Kaiser, executive vice president, is chief investment officer; Brian E. Schaefer, vice president, is client contact.

### Baillie Gifford Overseas Ltd.

2 Glenfinlas St., Edinburgh EH3 6YY U.K.; 031-225-2581

| | |
|---|---|
| Total assets managed | $3,654,000,000 |
| Tax-exempt assets managed | $146,000,000 |
| International assets managed | $146,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | C |
| No. of portfolio managers | 14 |
| Size of research staff | 16 |

Baillie Gifford Overseas Ltd. is an international equity and balanced manager.

Its equity approach is based on growth and emerging growth stocks. It seeks well-managed small and mid-size growth companies through fundamentally based asset allocation (top-down) and stock selection (bottom-up). Options are used.

The parent is Baillie Gifford & Co.

Clients include First RepublicBank.

Gavin J.N. Gemmell is chief investment officer; Ross Lidstone, marketing director, is client contact.

### Balch, Hardy & Scheinman

501 Fifth Ave., New York, N.Y. 10017; (212) 661-6290

| | |
|---|---|
| Total assets managed | $2,000,000,000 |
| Tax-exempt assets managed | $2,000,000,000 |
| Minimum separate account | $15,000,000 |
| Tax-exempt clients | 16 |
| Types of accounts managed | CFJG |
| No. of portfolio managers | 5 |
| Size of research staff | 2 |

Balch, Hardy & Scheinman Inc., an equity manager, overwrites options on the assets reported.

The firm uses an optimizer to get low-covariance portfolios to provide portfolios more efficient than the S&P 500 — i.e., higher return with lower risk.

The asset mix Jan. 1 was 95% stocks and 5% cash.

Half of the research is generated internally.

Clients include Baltimore, Houston, Los Angeles Fire & Police and Nevada.

William F. Balch, president, is chief investment officer and client contact.

### The Balcor Co.

4849 Golf Road, Skokie, Ill. 60077; (312) 676-7778

| | |
|---|---|
| Total assets managed | $6,082,000,000 |
| Tax-exempt assets managed | $2,000,000,000 |
| Real estate assets managed | $2,000,000,000 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 76 |
| Types of accounts managed | CEFJG |

The Balcor Co. is a real estate manager, emphasizing leveraged equity investments in luxury garden apartments, suburban office buildings and community shopping centers. Balcor is a long-term investor, focusing on effective property management to create and sustain value.

Tax-exempt assets are managed by Balcor Institutional Realty Advisors Inc., a subsidiary.

The asset mix Jan. 1 was 12.5% equity real estate and 87.5% hybrid debt.

Clients include State of Connecticut Trust Funds.

The parent is Shearson Lehman Hutton, a unit of American Express.

Rich Stern, senior vice president, is chief investment officer; Ron Gold, vice president, is client contact.

### Banc One Asset Management Corp.

100 E. Broad St., Columbus, Ohio 43271-0211; (614) 248-5631

| | |
|---|---|
| Total assets managed | $920,000,000 |
| Tax-exempt assets managed: | |
| Total | $535,000,000 |
| Commingled | $125,000,000 |
| Separate | $410,000,000 |
| 401(k)/457 assets managed | $30,000,000 |
| 401(k)/457 clients | 2 |
| Real estate assets managed | $9,000,000 |
| Indexed assets managed | $13,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients: | |
| Separate | 23 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 4 |
| Size of research staff | 5 |

Banc One Asset Management Corp. is an equity, fixed-income and balanced manager.

Its equity approach is highly disciplined, analyzing long-term financial characteristics of a company and then comparing the current price of the stock against its projected value.

For fixed-income, half a portfolio is fully invested, matching the duration of a selected benchmark, with the balance actively managed with emphasis on the yield curve, sectors and issues. Options, stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 60% stocks, 33% bonds, 5% cash and 2% mortgage-backed securities.

The parent is Banc One Corp.

James D. Wright, senior managing director, is chief investment officer; James R. Janetz, managing director, is client contact.

### BancOhio National Bank

155 E. Broad St., Columbus, Ohio 43251; (614) 463-7399

| | |
|---|---|
| Total assets managed | $1,006,000,000 |
| Tax-exempt assets managed: | |
| Total | $461,000,000 |
| Commingled | $11,000,000 |
| Separate | $450,000,000 |
| Real estate asset managed | $8,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients: | |
| Commingled | 2 |
| Separate | 323 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 12 |
| Size of research staff | 34 |

BancOhio National Bank is an equity, fixed-income and balanced manager.

Its equity approach employs sector rotation, seeking stocks with consistent earnings and dividend growth rates that exceed peer company levels.

Its fixed-income approach is based on interest rate anticipation and sector analysis combined with yield curve analysis for management of swaps.

It follows 200 stocks closely and 350, generally; 20% of research is

generated internally.

The parent is National City Corp.

Elwood Lewis and Robert Murphy are chief investment officers; Darwin Jones, vice president-business trust marketing, is client contact.

### BancOklahoma Trust Co.

P.O. Box 2300, Tulsa, Okla. 74192; (918) 588-6448

| | |
|---|---|
| Total assets managed | $2,228,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,770,000,000 |
| Commingled | $183,000,000 |
| Separate | $1,587,000,000 |
| 401(k)/457 assets managed | $547,000,000 |
| 401(k)/457 clients | 70 |
| Real estate assets managed | $230,000,000 |
| Indexed assets managed | $500,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 909 |
| Separate | 570 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 4 |

BancOklahoma Trust Co. is an equity, fixed-income, balanced, option equity, GIC and asset allocation manager.

Its equity approach focuses on core growth in a bottom-up method that emphasizes return on equity and growth in dividends and earnings.

Its fixed-income approach uses stepped maturities, emphasizes quality and uses government, government-guaranteed and agency securities as well as mortgage-backed securities.

Options and stock index futures are used.

The asset mix Jan. 1 was 38% stocks, 37% bonds, 12% cash and 13% mortgage-backed securities; $500,000 was in equity index funds.

The bank follows 50 stocks closely and 100, generally.

The parent company is Bank of Oklahoma.

Ned Schmidt, senior vice president and trust officer, is the chief investment officer; Jim Morris, vice president and trust officer, is the client contact.

### Bank of Boston

100 Federal St., 19th Floor, Boston, Mass. 02110; (617) 434-0494

| | |
|---|---|
| Total assets managed | $217,000,000 |
| Tax-exempt assets managed: | |
| Total | $217,000,000 |
| Commingled | $198,000,000 |
| Separate | $19,000,000 |
| Real estate assets managed | $186,000,000 |
| Tax-exempt clients: | |
| Commingled | 150 |
| Separate | 2 |
| Types of accounts managed | CG |

Bank of Boston Corp., a real estate manager, seeks to maximize net income returns while achieving steady increases in appreciation. Investments are diversified by property type, location and ownership format.

The parent is Bank of Boston Corp.

Clients include GM and MIT.

Thomas J. Lunny is chief investment officer; Patricia M. Haralson is client contact.

### The Bank of California/Merus Capital Management

475 Sansome St., San Francisco, Calif. 94111; (415) 984-8000

| | |
|---|---|
| Total assets managed | $3,200,000,000 |
| Tax-exempt assets managed: | |
| Total | $620,000,000 |
| Commingled | $141,000,000 |
| Separate | $479,000,000 |
| 401(k)/457 assets managed | $50,000,000 |
| Dedicated assets managed | $20,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients: | |
| Commingled | 64 |
| Separate | 30 |
| Types of accounts managed | CFGJ |
| No. of portfolio managers | 17 |
| Size of research staff | 7 |

The Bank of California/Merus Capital Management is an equity, fixed-income and balanced manager.

A yield manager, its managers purchase high-dividend yield stocks and apply a strong buy/sell discipline.

Its fixed-income approach uses interest rate anticipation and sector analysis. Portfolios are actively managed using above-average quality securities.

The asset mix Jan. 1 was 67% stocks, 26% bonds and 7% cash.

The parent company is Mitsubishi.

Anthony E. Spare, senior vice president and senior investment officer, is chief investment officer; Scott Merritt, Nancy Tengler and Donald Rossi, vice presidents, are client contacts.

### Bank of Delaware, Corporate Financial Services

222 Delaware Ave., Wilmington, Del. 19899; (302) 429-2265

| | |
|---|---|
| Total assets managed | $1,000,000,000 |
| Tax-exempt assets managed: | |
| Total | $150,000,000 |
| Commingled | $36,000,000 |
| Separate | $114,000,000 |
| Dedicated assets managed | $6,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients: | |
| Commingled | 75 |
| Separate | 50 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 1 |

Bank of Delaware is an equity, fixed-income manager and balanced manager.

Its growth stock equity approach uses various screens, including divi-

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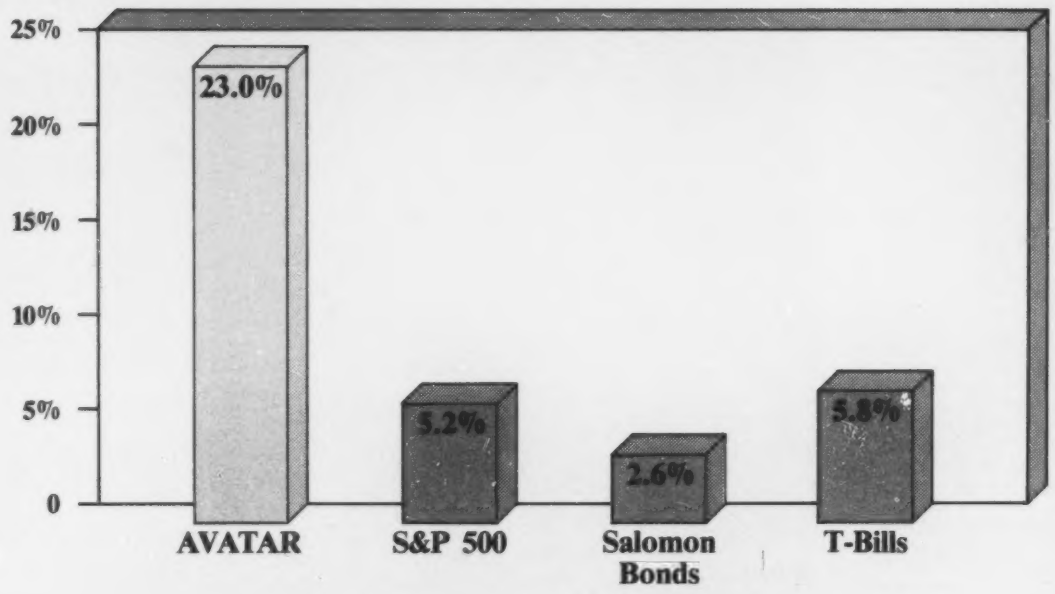


Performance is the mean time-weighted total rates of return of all discretionary tax-exempt accounts over $1 million. Past performance is no guarantee of future results.

■ EQUITY PORTFOLIO MANAGEMENT. Active stock selection (large capitalization issues) combined with the critical portfolio stocks/cash mix shifts.

■ TACTICAL ASSET ALLOCATION. Same asset mix shifts cost-efficiently implemented with an index fund and cash fund. Or, use stock index futures as an "invisible" hedge overlay to actively/passively managed equities.

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dend, capitalization, return on equity, p/e and debt/equity. Its fixed-income approach is technical, based on U.S. Treasury price trends.

The parent company is Bank of Delaware Corp.

Gerhard M. Okhuysen, assistant vice president, is the chief investment officer; John LeBourgeois is client contact.

## Bank IV Wichita

P.O. Box 4, Wichita, Kan. 67201-0004; (316) 261-4555

| | |
|---|---|
| Total assets managed | $634,000,000 |
| Tax-exempt assets managed: | |
| Total | $276,000,000 |
| Commingled | $43,000,000 |
| Separate | $233,000,000 |
| Real estate assets managed | $13,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients: | |
| Commingled | 74 |
| Separate | 263 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 12 |

Bank IV Wichita is an equity, fixed-income, balanced and real estate manager.

Its equity approach is value-driven with a renewed reliance on a dividend discount model.

Its fixed-income approach combines a risk-averse style with active management to preserve capital from risk of loss and to achieve a rate of return in excess of the respective index.

The parent company is Fourth Financial Corp.

Clients include General Dynamics, Kansas Gas & Electric, Physician Clinic of Kansas and St. Francis Medical Center.

Michael R. Ritchey is chief investment officer; Roger A. Ramseyer, trust officer and marketing manager, is client contact.

## The Bank of New York

48 Wall St., New York, N.Y. 10286; (212) 495-1626

| | |
|---|---|
| Total assets managed | $13,800,000,000 |
| Tax-exempt assets managed: | |
| Total | $3,500,000,000 |
| Commingled | $900,000,000 |
| Separate | $2,600,000,000 |
| Real estate assets managed | $125,000,000 |
| International assets managed | $5,000,000 |
| Indexed assets managed | $50,000,000 |
| Dedicated assets managed | $10,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients: | |
| Separate | 75 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 60 |
| Size of research staff | 11 |

The Bank of New York is an equity, fixed-income and balanced manager.

Its equity approach uses portfolios individually structured to meet client objectives. After identifying major economic and political forces, portfolios are constructed using the appropriate approach: growth, earnings momentum and yield.

Its fixed-income approach uses individually structured portfolios to satisfy client return objectives and tolerance for short-term volatility. The portfolio is constructed using interest rate anticipation, sector analysis and credit quality changes.

Options are used.

The asset mix Jan. 1 was 57% stocks, 35% bonds and 8% cash; $125 million was in mortgage-backed securities, $5 million in foreign stocks and $50 million in bond index funds.

Charles L. Booth, executive vice president, is chief investment officer; Jeannette Gadomski, vice president, is the client contact.

## Bank One, Indianapolis

101 Monument Circle, Indianapolis, Ind. 46277; (317) 639-8151

| | |
|---|---|
| Total assets managed | $6,051,000,000 |
| Tax-exempt assets managed: | |
| Total | $3,504,000,000 |
| Commingled | $28,000,000 |
| Separate | $3,476,000,000 |
| Real estate assets managed | $280,000,000 |
| Dedicated assets managed | $250,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients: | |
| Commingled | 132 |
| Separate | 384 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 13 |
| Size of research staff | 5 |

Bank One, Indianapolis is an equity, fixed-income and balanced manager.

In equities, the bank takes a value-oriented approach. Stock selection focuses on a bottom-up approach involving analysis of cash flow, revenue and current vs. historical price.

The bank actively manages fixed-income portfolios. Emphasis is given to controlling maturity and duration of a portfolio given the economic outlook and its implications for the trend in interest rates.

Options are used.

The asset mix Jan. 1 was 10% stocks, 70% bonds, 10% cash, 8% mortgage-backed securities and 2% GICs.

The bank follows 250 stocks closely and more than 6,000, generally; 80% of research is generated internally.

Clients include Hallmark Cards, Indiana Teachers and Texas Eastern.

The parent is Banc One Corp.

Leif E. Nulsen, senior vice president, is chief investment officer; Phillip E. Chambers, vice president and investment officer, is the client contact.

## Bank of Tokyo Trust Co.

100 Broadway, New York, N.Y. 10005; (212) 766-3400

| | |
|---|---|
| Total assets managed | $382,000,000 |
| Tax-exempt assets managed: | |
| Total | $124,000,000 |
| Commingled | $82,000,000 |
| Separate | $42,000,000 |
| International assets managed | $6,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 62 |
| Separate | 14 |
| Types of accounts managed | CF |
| No. of portfolio managers | 4 |

Bank of Tokyo Trust Co. is an equity, fixed-income, balanced and global/international manager.

Its equity approach combines sector rotation and market timing, using technical analysis to participate in short and intermediate market cycles.

Its fixed-income approach uses interest rate anticipation and sector analysis, emphasizing the purchase of undervalued bonds.

It uses options and fixed-income futures.

Charles E. Ryan is chief investment officer; Cynthia K. Ormsby is client contact.

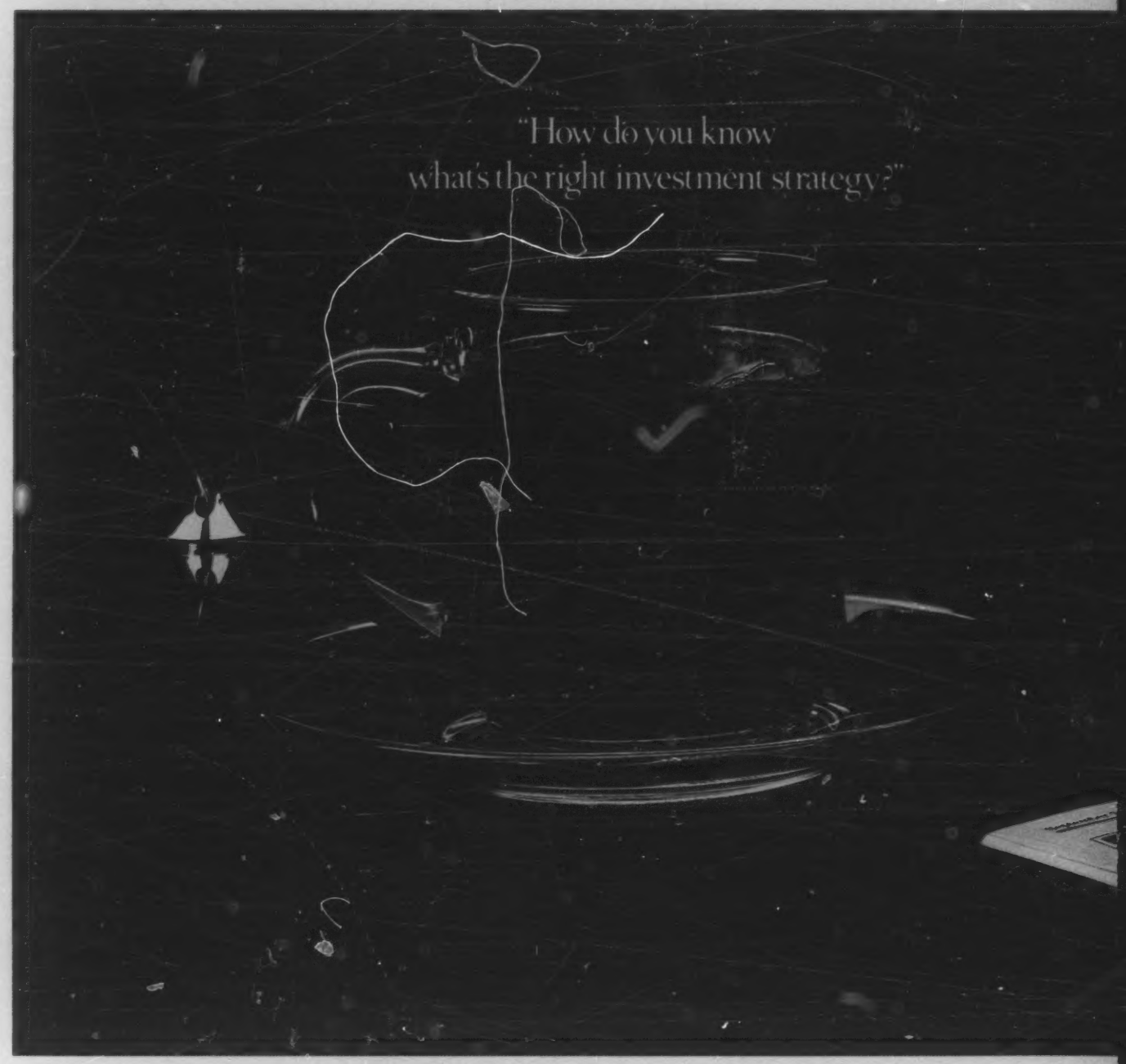
## Bank of the West Trust & Financial Services

P.O. Box 1121, San Jose, Calif., 95108; (408) 998-6857

| | |
|---|---|
| Total assets managed | $142,000,000 |
| Tax-exempt assets managed: | |
| Total | $35,000,000 |
| Commingled | $5,000,000 |
| Separate | $30,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients: | |
| Commingled | 40 |
| Separate | 27 |
| Types of accounts managed | CFG |
| No. of portfolio managers | 1 |

Bank of the West Trust & Financial Services is an equity, fixed-income and balanced manager.

Its equity approach focuses on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Ætna Capital Management, Inc.

Federated Investors, Inc. (Pittsburgh)

growth and low p/e stocks using Graham & Dodd analysis.

Its fixed-income approach focuses on interest rate anticipation, market liquidity and strong credit. Maturities generally are up to five years.

The parent is Banque Nationale de Paris.

Joseph W. Hefner, vice president, is chief investment officer; Donald L. Draper, senior vice president, is client contact.

### Bankers Trust Co. - Investment Management Group

280 Park Ave., New York, N.Y. 10015; (212) 850-2050

| | |
|---|---|
| Total assets managed | $57,845,000,000 |
| Tax-exempt assets managed: | |
| Total | $52,807,000,000 |
| Commingled | $20,010,000,000 |
| Separate | $32,797,000,000 |
| International assets managed | $2,078,000,000 |
| Indexed assets managed | $21,041,000,000 |
| Dedicated assets managed | $3,634,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients: | |
| Separate | 146 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 36 |
| Size of research staff | 20 |

Bankers Trust Co. - Investment Management Group is an equity, fixed-income, balanced, international, index, options and futures, GIC and corporate cash manager.

Through investment management units located in New York, Tokyo, London and Sydney, active and passive mode capability for a variety of domestic and international strategies are offered.

The asset mix Jan. 1 was 47% stocks, 25% bonds and 28% cash and short-term investments. The firm had $1.045 billion in foreign stocks, $1.033 billion in foreign bonds, $18.547 billion in equity index funds and $2.494 billion in bond index funds. Portfolio insurance is provided to four clients covering $600 million in assets.

Clients include CBS, GM, Times-Mirror and San Francisco City and County.

The parent company is Bankers Trust New York Corp.

H. Kent Atkins is the chief investment officer; Michael E. Fisher, managing director-marketing and sales, is the client contact.

### Baring America Asset Management Co. Inc.

77 Franklin St., Boston, Mass. 02110; (617) 357-8480

| | |
|---|---|
| Total assets managed | $1,473,000,000 |
| Tax-exempt assets managed | $1,446,000,000 |
| 401(k)/457 assets managed | $1,446,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 37 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 6 |
| Size of research staff | 10 |

Baring America Asset Management Co. Inc. is an equity, fixed-income and balanced manager.

Its equity strategy is a disciplined approach to growth stock management with emphasis placed on stock valuations and sector diversification.

Its fixed-income approach uses sector weighting and issue selection to add value while interest rate risk is controlled within narrow bands. High yield and investment-grade management are offered.

The asset mix Jan. 1 was 40% stocks, 48% bonds and 12% cash.

The firm follows 100 stocks closely and 1,200, generally; 80% of the research is generated internally.

The parent is Barings PLC.

Clients include TRW, Smith College, Tufts University and Northeast Utilities.

Stephen D. Cutler is chief investment officer; James MacMillan and Shaun Levesque are client contacts.

### Baring International Investment Ltd.

9 Bishopsgate, London EC2N 3AQ U.K.; 01-623-5264

| | |
|---|---|
| Total assets managed | $2,006,000,000 |
| Tax-exempt assets managed | $1,801,000,000 |
| International assets managed | $1,801,000,000 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients | 23 |
| Types of accounts managed | CG |
| No. of portfolio managers | 11 |
| Size of research staff | 22 |

Baring International Investment Ltd. is an international equity and fixed-income manager.

Its equity approach combines growth and low p/e stocks and market timing.

Its fixed-income approach uses relative currency attraction and interest rate anticipation.

The asset mix as of Jan. 1 was 60% stocks, 30% bonds and 10% cash.

The firm follows 200 stocks closely and 450, generally; 70% of research is generated internally.

The parent is Baring International Investment Management.

Clients include Inland Steel, GTE, Ameritech and PRIM.

Peter S. Hartley, managing director, is chief investment officer; John F. McNamara, director, is client contact at (617) 357-9074.

### Weaver C. Barksdale & Associates

30 Burton Hills Blvd. Suite 550, Nashville, Tenn. 37219; (615) 665-1090

| | |
|---|---|
| Total assets managed | $557,000,000 |
| Tax-exempt assets managed | $557,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 15 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Weaver C. Barksdale & Associates, a fixed-income manager, offers two products. The "controlled risk" strategy is a short to intermediate approach emphasizing core enhancement, active management and gradual duration adjustment. The "opportunity" strategy is a comprehensive approach emphasizing duration adjustment and security selection. Fixed-income futures are used.

The asset mix Jan. 1 was 100% bonds.

Clients include Major League Baseball Players Association, Metro Government of Nashville and United Methodist Church.

Weaver C. Barksdale, president, is chief investment officer; John E. McDowell, senior vice president, is client contact.

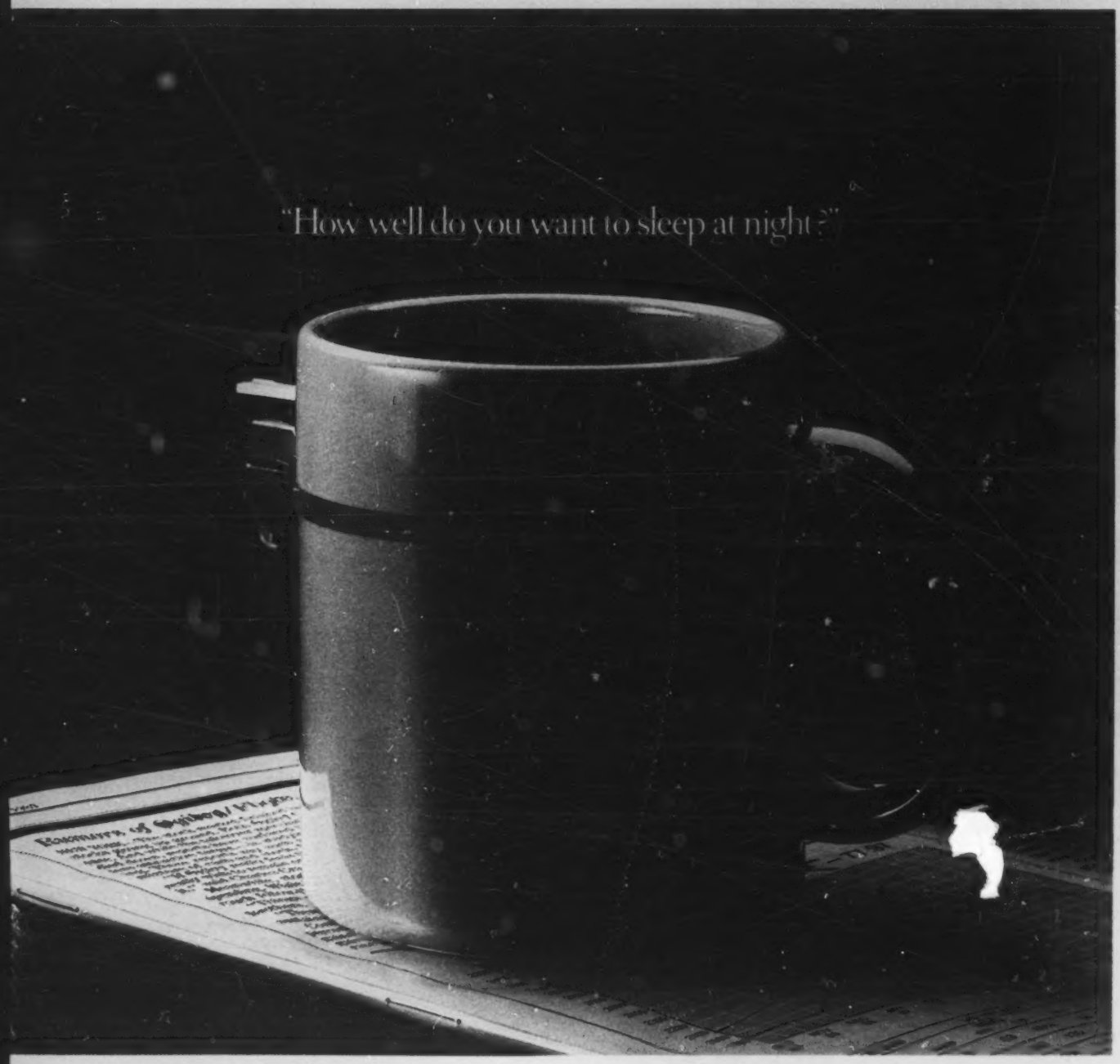
### Barnett Banks Trust Co.

801 Riverside Ave., Jacksonville, Fla., 32204; (904) 798-2743

| | |
|---|---|
| Total assets managed | $4,541,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,195,000,000 |
| Commingled | $205,000,000 |
| Separate | $990,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 600 |
| Separate | 150 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 4 |
| Size of research staff | 6 |

Barnett Banks Trust Co. is an equity, fixed-income and balanced manager.

Its equity approach uses a multiple quantitative screening process to find stocks displaying sound quality, high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relative value and strong momentum in earnings expectations.

In fixed income, maturity selection is based on interest rate expectations, yield curve configurations and multi-scenario total return computations. Quality and sector weightings are based on current and historic yield spreads and credit worthiness.

As of Jan. 1, the asset mix was 49% stocks, 44% bonds and 7% cash.

Clients include Florida State, Jim Walter, City of Jacksonville and Jack Eckerd.

The parent company is Barnett Banks Inc.

Charles Montford, senior vice president, is chief investment officer; Donald E. Griffith, director of sales and marketing, is client contact.

### Barrow, Hanley, Mewhinney & Strauss

200 Crescent Court 19th Floor, Dallas, Texas 75201; (214) 871-5300

| | |
|---|---|
| Total assets managed | $4,967,000,000 |
| Tax-exempt assets managed | $4,929,000,000 |
| Real estate assets managed | $35,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 62 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 7 |

Barrow, Hanley, Mewhinney & Strauss is an equity, fixed-income and balanced manager.

Its equity approach emphasizes low p/e, high dividend yield and low price/book ratios.

Its fixed-income approach uses sector analysis and looks for high yield to maturity, high current yield, high quality and conservative maturity structure. Portfolios have a structural advantage vs. the market, regardless of interest rate movement and additional value is gained through investing in undervalued securities generating a high yield to maturity.

The asset mix Jan. 1 was 88% stocks, 8.5% bonds, 3% cash and 0.5% mortgage-backed securities.

It follows 250 stocks closely and 750, generally; 50% of research is generated internally.

The parent is United Asset Management.

Clients include Vanguard, GM, Federal Reserve and American Airlines.

Bryant M. Hanley Jr., president, is chief investment officer; Peter F. Bridge, vice president, is client contact.

### Bartlett & Co.

36 E. Fourth St., Cincinnati, Ohio 45202; (513) 621-4612

| | |
|---|---|
| Total assets managed | $1,200,000,000 |
| Tax-exempt assets managed | $480,000,000 |
| Real estate assets managed | $116,000,000 |
| International assets managed | $16,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 244 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 15 |
| Size of research staff | 5 |

Bartlett & Co. is an equity, fixed-income, balanced and real estate manager.

Its equity approach centers on low p/e stocks and Graham & Dodd analysis in a value-oriented strategy emphasizing asset values and strong financial positions. Its fixed-income approach uses sector analysis.

For real estate investments, it seeks overlooked commercial and industrial properties with an emphasis on current income.

The firm follows 75 stocks closely and 250, generally; 80% of the research is generated internally.

Clients include Miami University, Xavier University, Burke Marketing and Jewish Hospital of Cincinnati.

William A. Friedlander is the chief investment officer; Woodrow H. Uible is the client contact.

### Batterymarch Financial Management

600 Atlantic Ave., Boston, Mass. 02210; (617) 973-9300

| | |
|---|---|
| Total assets managed | $8,200,000,000 |
| Tax-exempt assets managed | $6,748,000,000 |
| International assets managed | $521,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 87 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 9 |

Batterymarch Financial Management is an equity and international/global manager.

It uses sector rotation in its value-oriented, quantitative and contrarian investment approach, targeting cheap, unpopular stocks in order to exploit uncertainty rather than fight it.

The asset mix Jan. 1 was 99% stocks and 1% cash. As of the same date, the firm had $521 million in foreign stocks.

The firm follows 3,500 stocks closely and 9,000, generally; all research is generated internally.

Dean LeBaron, trustee, is chief investment officer; Susan Weiner, trustee, is client contact

### Baxter & Hoops Inc.

115 W. Washington St., Indianapolis, Ind. 46204; (317) 635-7120

| | |
|---|---|
| Total assets managed | $380,000,000 |
| Tax-exempt assets managed | $242,000,000 |
| Real estate assets managed | $197,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 4 |
| Types of accounts managed | CG |
| No. of portfolio managers | 3 |
| Size of research staff | 1 |

Baxter & Hoops Inc. is a fixed-income manager.

Portfolio duration is varied by using interest rate anticipation based upon business cycle analysis. The firm also uses sector analysis with an emphasis on the quality of holdings.

Clients include Indiana Teachers.

Gary Baxter and Norman Hoops are the chief investment officers and client contacts.

### BayBank Trust Services

7 New England Executive Park, Burlington, Mass. 01803; (617) 229-4637

| | |
|---|---|
| Total assets managed | $1,206,000,000 |
| Tax-exempt assets managed: | |
| Total | $706,000,000 |
| Commingled | $91,000,000 |
| Separate | $615,000,000 |
| 401(k)/457 assets managed | $24,000,000 |
| 401(k)/457 clients | 72 |
| Minimum separate account | $500,000 |
| Tax-exempt clients: | |
| Commingled | 480 |
| Separate | 280 |
| Types of accounts managed | CEG |
| No. of portfolio managers | 9 |
| Size of research staff | 2 |

BayBank Trust Services is an equity, fixed-income and balanced manager.

Its equity approach is quantitative; the firm employs a modeling technique that identifies companies by quality, earnings growth and market capitalization.

The results are ranked by current operating and market characteristics to produce a universe and buy list.

Its fixed-income approach is passive.

The parent company is BayBanks Inc.

Clients include Newton Wellesley Hospital and Mount Auburn Hospital.

L. Sumner Hopkins II, executive vice president, is chief investment officer; Eugene D. Mahoney, vice president, is client contact.

### BBL Capital Management

Avenue Marnix 24, Brussels, Belgium 1050; 011-32-2-517-30-94

| | |
|---|---|
| Total assets managed | $925,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $5,000,000 |
| No. of portfolio managers | 4 |
| Size of research staff | 23 |

BBL Capital Management Corp. is an international equity, fixed-income and balanced manager.

Its equity approach uses sector rotation, market timing and low p/e stocks. Its fixed-income approach uses interest rate anticipation.

The firm follows 150 stocks closely and 300, generally.

The firm generates 25% of its research internally.

The parent company is Banque Bruxelles Lambert.

Philippe Desirant, senior manager, is chief investment officer; G. Duneme, managing director, is client contact.


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## BEA Associates Inc.

153 E. 53rd St. 58th Floor, New York, N.Y. 10022; (212) 832-2626

| | |
|---|---|
| Total assets managed | $7,663,000,000 |
| Tax-exempt assets managed | $7,206,000,000 |
| 401(k)/457 assets managed | $2,000,000 |
| 401(k)/457 clients | 2 |
| International assets managed | $363,000,000 |
| Index funds managed | $930,000,000 |
| Dedicated funds managed | $697,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 159 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 7 |
| Size of research staff | 8 |

BEA Associates is an equity, fixed-income, balanced and international manager offering low-risk arbitrage and enhanced index fund management.

The firm uses a value-oriented equity approach, seeking situations where it disagrees with consensus estimates of cash flows and discount rates.

It structures fixed-income portfolios to resemble client-specified benchmarks, adding value through issue selection, sector selection and swapping.

Options, stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 50% stocks, 25% bonds, 5% cash and 20% other; $267 million was in foreign stocks, $96 million in foreign bonds, $553 million in equity index funds and $377 million in bond index funds.

Clients include Central States Teamsters, Oregon and Unisys.

Albert L. Zesiger, president and chairman, is chief investment officer; Timothy T. Taussig, director of client development, is client contact.

## Beacon Capital Management

2 World Trade Center, Suite 8546, New York, N.Y. 10048; (212) 912-6900

| | |
|---|---|
| Total assets managed | $740,000,000 |
| Tax-exempt assets managed | $704,000,000 |
| Dedicated funds managed | $31,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 17 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 5 |
| Size of research staff | 1 |

Beacon Capital Management is an equity, fixed-income and balanced manager.

Its dual equity approach uses Graham & Dodd analysis to assess value while controlling market risk through adjustment of cash reserves. It invests in quality, undervalued companies with positive fundamentals.

Its fixed-income approach is based on interest rate anticipation and is implemented through the timely adjustment of the maturity and duration of U.S. Treasury and agency issues.

The asset mix Jan. 1 was 50% bonds and 50% cash.

The parent company is The Bank of New York Co. Inc.

Samson Wang, president, is chief investment officer; Thomas F. Murphy, director of marketing, is the client contact.

## Bear Stearns Asset Management

245 Park Ave., New York, N.Y. 10167; (212) 272-2814

| | |
|---|---|
| Total assets managed | $2,702,000,000 |
| Tax-exempt assets managed | $2,515,000,000 |
| 401(k)/457 assets managed | $100,000,000 |
| Real estate assets managed | $297,000,000 |
| Index funds managed | $160,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 106 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 9 |

Bear Stearns Asset Management is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented, focusing on low p/e stocks. The firm uses a set of proprietary screens to isolate companies with strong fundamental characteristics whose prices are below market or industry levels. It then identifies those with strong upside price potential.

Its fixed-income approach is conservative, investing primarily in U.S. government securities. Portfolio average maturities are adjusted according to interest rate trends.

The asset mix Jan. 1 was 35% stocks, 50% bonds, 4% cash and 11% mortgages. As of the same date, the firm had $297 million in mortgages and $160 million in bond index funds.

The parent is Bear, Stearns & Co. Inc.

Clients include Chrysler, Wake Forest University and New York City.

Peter N. Marron is chief investment officer; Milton B. Rubin, chief executive officer, and John F. Boneparth, director of marketing and client services, are the client contacts.

**25 largest insurance companies* ranked by tax-exempt assets**

| Firm | $ millions |
|---|---|
| Prudential | 77,841 |
| Equitable | 56,430 |
| Metropolitan Life | 52,506 |
| Aetna Life | 40,566 |
| The New England | 31,452 |
| Travelers | 27,522 |
| CIGNA | 21,705 |
| Pacific Mutual | 20,149 |
| John Hancock Financial | 17,797 |
| New York Life | 16,710 |
| The Principal | 14,225 |
| Mass Mutual Life | 9,300 |
| MONY Financial | 8,240 |
| Marsh & McL. (Putnam) | 7,361 |
| VALIC | 7,084 |
| Transamerica Investment | 6,166 |
| Mutual Benefit Life | 5,530 |
| Great-West Life | 5,500 |
| Liberty Mutual (Stein Roe) | 5,286 |
| Provident Nat'l Assurance | 4,951 |
| Nationwide Life | 3,934 |
| UNUM Life | 3,841 |
| Continental Assurance | 3,721 |
| N'west. Nat'l (Wash. Sq.) | 3,699 |
| Hartford Life | 3,336 |
| **Total** | **464,864** |

* Includes subsidiaries' assets.

## P.E. Becker Inc.

2185 Pacwest Center, Portland, Ore. 97208; (503) 223-1720

| | |
|---|---|
| Total assets managed | $325,000,000 |
| Tax-exempt assets managed | $207,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 55 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 4 |
| Size of research staff | 2 |

P.E. Becker Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses strong fundamental research to identify companies with low expectations, low p/e multiples and strong financials. Careful attention is given to the price paid for a stock. Its active fixed-income approach focuses on sector analysis, seeking the best values at a given time relative to risk.

It follows 150 stocks closely; 50% of research is generated internally.

Clients include University of Portland and Washington Water Power.

Patrick E. Becker, president, is chief investment officer and client contact.

## Becker Williams & Co.

250 S. Wacker Drive, Chicago, Ill. 60606; (312) 993-4120

| | |
|---|---|
| Total assets managed | $10,000,000 |
| Tax-exempt assets managed | $10,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 1 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

Becker Williams & Co. provides fixed-income overwrite and hedge programs. It uses stock index futures/options to hedge equity portfolios using proprietary timing programs. The firm is a yield enhancement specialist, developing programs that increase yields on passive fixed-income portfolios by 200 to 400 basis points. It also has a sector analysis overwrite program.

H. Phillip Becker, president, is the chief investment officer; William Eichengreen Jr., executive vice president, is the client contact.

## Bell Capital Management

1945 The Exchange Suite 235, Atlanta, Ga. 30339; (404) 952-7039

| | |
|---|---|
| Total assets managed | $125,000,000 |
| Tax-exempt assets managed | $90,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 150 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 5 |

Bell Capital Management Inc. is an equity and fixed-income manager.

Its equity approach uses growth stock and market timing. Equity accounts own varying combinations of common stocks, straight and convertible bonds, and money market instruments.

Its fixed-income approach is driven by interest rate anticipation.

The firm follows 50 stocks closely and 80, generally; 50% of the research is generated internally.

Ron H. Bell, president, is chief investment officer and client contact.

## Bennett & Kahnweiler Realty Advisors

9700 W. Bryn Mawr, Rosemont, Ill. 60018; (312) 671-7911

| | |
|---|---|
| Total assets managed | $356,000,000 |
| Tax-exempt assets managed | $275,000,000 |
| Real estate assets managed | $275,000,000 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | G |

Bennett & Kahnweiler Realty Advisors, a real estate manager, creates entrepreneurial, value-oriented customized portfolios emphasizing Midwest properties.

The parent company is Bennett & Kahnweiler Inc.

Clients include Illinois Teachers and Ohio Teachers.

James S. Smith is chief investment officer and client contact.

## Berg Capital Corp.

600 Madison Ave., New York, N.Y. 10022; (212) 308-4705

| | |
|---|---|
| Total assets managed | $77,000,000 |
| Tax-exempt assets managed | $32,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | CF |
| No. of portfolio managers | 2 |

Berg Capital Corp. is an equity and balanced manager.

The firm invests in equities for growth and cash for protection of value. Bonds are purchased when opportunity warrants. Fundamental analysis is the basis of its approach.

The firm follows 100 stocks closely and 200, generally; 25% of research is generated internally.

Clients include Kidde, Interstate Brands and Giant Cement.

Jonathan A. Berg, president, is the chief investment officer; Deborah C. Foord, vice president, is the client contact.

## Sanford C. Bernstein & Co.

767 Fifth Ave., New York, N.Y. 10153; (212) 486-5800

| | |
|---|---|
| Total assets managed | $10,100,000,000 |
| Tax-exempt assets managed | $8,600,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 1,509 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 20 |
| Size of research staff | 40 |

Sanford C. Bernstein & Co. is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented, using Graham & Dodd analysis to seek extreme mispricings. Value is defined by the relationship of price to long-term earnings and dividends. Sector rotation is used.

Using sector analysis, the firm is a value-oriented, intermediate-term bond manager. Quantitative research evaluates relationships between and within sectors and along the yield curve, and also values the components of a bond (call, sector, quality, etc.). A disciplined buy/sell process is used.

Fixed-income futures are used.

The asset mix Jan. 1 was 72% stocks, 25% bonds and 3% cash.

The firm follows 544 stocks closely and 544, generally; 90% of research is generated internally.

Clients include New York State Teachers, Johnson & Johnson, Ralston Purina and Allegheny Power System.

Peter Carmen, chairman of the investment policy group, is chief investment officer; Richard S. Abramson, director-pension asset advisers, is the client contact.

## Bernstein-Macaulay Inc.

410 Park Ave., New York, N.Y. 10022; (212) 906-2900

| | |
|---|---|
| Total assets managed | $14,732,000,000 |
| Tax-exempt assets managed | $637,000,000 |
| Real estate assets managed | $25,000,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 8 |
| Size of research staff | 3 |

Bernstein-Macaulay Inc. is primarily a fixed-income manager.

In equities, the firm uses a systematic approach based on the premise the volatility of individual securities can be used to improve overall portfolio returns while increasing diversity and methodically reducing portfolio risk.

The firm specializes in fixed-income portfolios emphasizing active sector management, moderate maturity/duration adjustments and credit analysis on individual issues.

Options and fixed-income futures are used.

The asset mix Jan. 1 was 80% stocks, 6% bonds, 7% cash and 4% mortgage-backed securities.

The parent company is Shearson Lehman Hutton, a unit of American Express Co.

Robert G. Moore, president, is chief investment officer; Joseph Griffin, senior vice president, is client contact.

## Bessemer Trust Co.

630 Fifth Ave., New York, N.Y. 10111; (212) 708-9100

| | |
|---|---|
| Total assets managed | $5,279,000,000 |
| Tax-exempt assets managed | $636,000,000 |
| International assets managed | $367,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 75 |
| Types of accounts managed | CEFG |
| Size of research staff | 8 |

Bessemer Trust Co. is an equity, fixed-income, balanced, international and real estate/oil and gas direct investment manager.

Its equity approach focuses on market cycle and market theme analysis, taking greater risks in stock selection in rising markets and employing defensive strategies to preserve capital in bear markets. Its fixed-income approach uses interest rate anticipation and sector analysis. Portfolios are actively managed to preserve capital. Options and stock index futures are used.

Real estate and oil and gas investments are determined by client objectives and risk parameters.

The asset mix Jan. 1 was 51% stocks, 31% bonds, 14% cash and 4% other.

The parent is Bessemer Group Inc.

John R. Whitmore, chief executive officer, is chairman of the investment policy and strategy committee; Robert C. Elliott, senior executive vice president, is client contact.

## Beutel, Goodman Capital Management Ltd.

2030 Texas Commerce Tower, Houston, Texas 77002; (713) 221-1790

| | |
|---|---|
| Total assets managed | $781,000,000 |
| Tax-exempt assets managed | $761,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 17 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 4 |
| Size of research staff | 8 |

Beutel, Goodman Capital Management Ltd. is an equity and balanced manager.

Its equity approach uses sector rotation and Graham & Dodd analysis. The firm seeks companies selling at a discount to their book or asset value, or companies selling at a low relative p/e multiple, given their investment characteristics and forecasted earnings growth. Its fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 90% stocks and 10% cash.

The parent company is Beutel, Goodman & Co.

Clients include New York State Teachers and CPC International.

Robert F. McFarland, president, is chief investment officer; J. Philip Ferguson, vice president, is client contact.

## Beutel, Goodman International PLC

37-39 St. Andrew's Hill, London, EC4V 5BY U.K.; 011-44-1-489-0218

| | |
|---|---|
| Total assets managed | $347,000,000 |
| Tax-exempt assets managed | $242,000,000 |
| International assets managed | $242,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 1 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Beutel, Goodman International PLC is a global/international fixed-income manager.

Its investment approach uses interest rate anticipation and relative value analysis across countries to identify opportunities. The focus is on active country allocation in liquid markets. The firm principally uses the highest quality securities with the longest maturity available.

Olaf Rogge, principal, is the chief investment officer and client contact. The U.S. marketing representative is Fairfield Capital Associates Inc., Westport, Conn., (203) 254-1215.

## The Beyreuther Co.

1616 17th St. Suite 469, Denver, Colo. 80202; (303) 628-5554 or (312) 790-0333

| | |
|---|---|
| Total assets managed | $3,000,000 |
| Tax-exempt assets managed | $3,000,000 |
| Tax-exempt clients | 1 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |

The Beyreuther Co. is an equity manager that emphasizes growth stock and quantitative research combined with passive management. Its customized passive equity product, designed to beat the S&P 500, is based on a universe of fast-growing and fundamentally strong, domestically traded equities.

It follows 100 stocks closely and 1,700 generally; all research is generated internally.

Its client is Associates in Gynecological Surgery and Obstetrics.

Paul A.R. Beyreuther is chief investment officer and client contact.

## BHI Realty Advisors

4701 Von Karman Ave., Newport Beach, Calif. 92660; (714) 476-7060

| | |
|---|---|
| Total assets managed | $240,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $25,000,000 |
| No. of portfolio managers | 2 |

BHI Realty Advisors, primarily a real estate manager, takes a passive approach in other areas. Its real estate approach focuses on the purchase of new, institutional-quality properties.

The parent company is Bonutto-Hofer Investments.

Harold C. Hofer, president, is chief investment officer and client contact.

## Bigler/Crossroads

1 State St., Hartford, Conn. 06103; (203) 527-7666

| | |
|---|---|
| Total assets managed | $350,000,000 |
| Tax-exempt assets managed | $318,000,000 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients | 20 |
| Types of accounts managed | CG |

Bigler/Crossroads is a venture capital manager.

Harold E. Bigler Jr., is the chief investment officer and client contact.

## Birtcher Real Estate Cos.

27611 LaPaz Road, Laguna Niguel, Calif. 92677; (714) 831-8031

| | |
|---|---|
| Total assets managed | $1,000,000,000 |
| Tax-exempt assets managed | $500,000,000 |
| Real estate assets managed | $500,000,000 |
| Minimum separate account | $35,000,000 |
| Tax-exempt clients | 20 |
| Types of accounts managed | CJG |

Birtcher Real Estate Cos. offers real estate investment management.

Through Smith Barney Birtcher Realty Advisors, a joint venture with Smith Barney Inc., separate accounts and closed-end funds concentrate on

middle-market properties in suburban and secondary markets. The focus is on office, industrial, commercial and retail. All real estate services offered are 100% proprietary.

All assets were fully invested in equity real estate Jan. 1.

Albert Nagy, executive vice president, is chief investment officer; Ralph E. Heckert, senior vice president, is client contact at (800) 233-2353.

### George D. Bjurman & Associates

10100 Santa Monica Blvd. Suite 2300, Los Angeles, Calif. 90067; (213) 553-6577

| | |
|---|---|
| Total assets managed | $714,000,000 |
| Tax-exempt assets managed | $698,000,000 |
| 401(k)/457 assets managed | $5,000,000 |
| 401(k)/457 clients | 3 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 42 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 4 |

George D. Bjurman & Associates is an equity, fixed-income and balanced manager.

For equities, the firm employs a value-oriented investment approach with emphasis on high quality companies with strong earnings and dividend growth prospects.

Fixed-income assets are strategically invested using an active bond management approach, emphasizing shifts in maturity, sector, quality and coupon structure.

The asset mix Jan. 1 was 55% stocks, 38% bonds and 7% cash.

The investment committee is made up of George D. Bjurman, chairman; G. Andrew Bjurman, president and chief executive officer; O. Thomas Barry III, senior executive vice president and director of investments; and Stephen K. Kent Jr., senior executive vice president and director of research. Mr. Barry is client contact.

### William Blair & Co.

135 S. LaSalle St., Chicago, Ill. 60603; (312) 236-1600

| | |
|---|---|
| Total assets managed | $1,897,000,000 |
| Tax-exempt assets managed | $947,000,000 |
| 401(k)/457 assets managed | $19,000,000 |
| 401(k)/457 clients | 28 |
| Real estate assets managed | $9,000,000 |
| Minimum separate account | $1,500,000 |
| Tax-exempt clients | 130 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 14 |
| Size of research staff | 13 |

William Blair & Co. is an equity, fixed-income and balanced manager.

Its equity approach emphasizes emerging growth and growth stocks. The firm identifies stocks where stable growth, conservative finances and established quality managements should lead to long-term capital appreciation.

Its fixed-income approach uses sector analysis to find high-quality, intermediate-maturity instruments to produce current income with little capital risk.

The asset mix Jan. 1 was 69% stocks, 20% bonds, 10% cash and 1% mortgage-backed securities.

Clients include Toys "R" Us, Kresge Foundation, Morton Thiokol and Purdue University.

Conrad Fischer is chief investment officer; Rocky Barber, partner and manager-investment management department, is client contact.

### BMI Capital Corp.

67 Wall St., New York, N.Y. 10005; (212) 422-1619

| | |
|---|---|
| Total assets managed | $305,000,000 |
| Tax-exempt assets managed | $220,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | CFG |
| No. of portfolio managers | 4 |
| Size of research staff | 9 |

BMI Capital Corp., an equity manager, uses intensive in-house research and focuses outside the mainstream to identify demonstrated and expected growth stocks. Companies must offer both value in the form of cash flow or assets and dynamics in the form of increased earnings potential.

The parent company is Brean Murray, Foster Securities Inc.

Clients include Minnesota, GTE, Upjohn and Norton.

James D. Awad, president, and Francis J. Houghton Jr., chairman, are the chief investment officers; Sandra A. Jerro, senior vice president, is the client contact.

### The Boatmen's National Bank of St. Louis

100 N. Broadway, St. Louis., Mo. 63102; (314) 425-7777

| | |
|---|---|
| Total assets managed | $7,417,000,000 |
| Tax-exempt assets managed: | |
| Total | $5,711,000,000 |
| 401(k)/457 assets managed | $163,000,000 |
| 401(k)/457 clients | 42 |
| Minimum separate account | $1,000,000 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 16 |
| Size of research staff | 6 |

The Boatmen's National Bank of St. Louis is an equity, fixed-income and balanced manager.

Its equity approach is quantitative, and the fixed-income approach is based on interest rate anticipation. Options are used.

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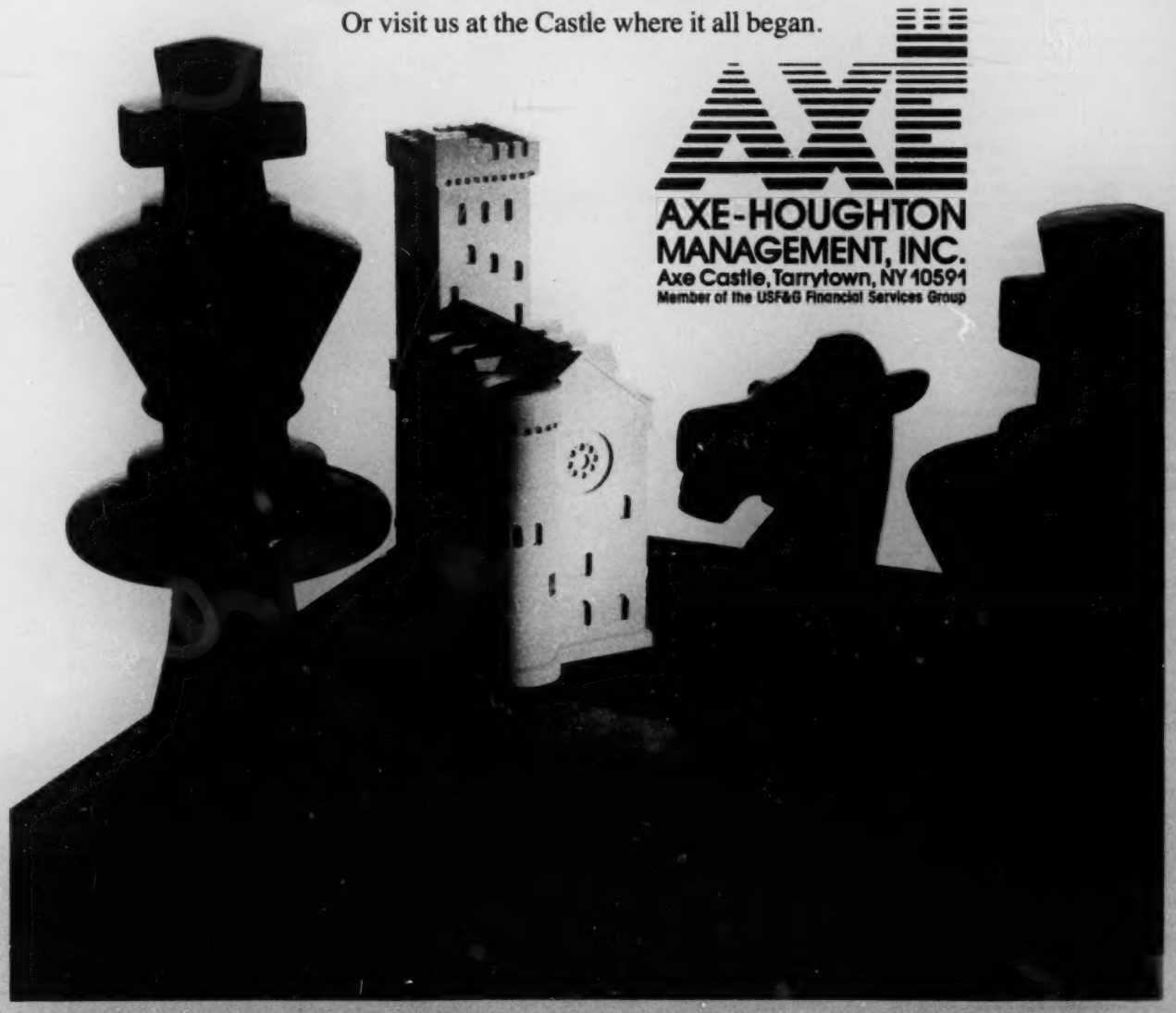


AXE-HOUGHTON MANAGEMENT, INC.
Axe Castle, Tarrytown, NY 10591
Member of the USF&G Financial Services Group

The asset mix Jan. 1 was 40% stocks, 48% bonds and 12% cash.

The parent company is Boatmen's Bancshares Inc.

Clients include Brown Group, Interco and Laclede Gas.

Russell W. Murphy, senior vice president, is chief investment officer; H. William Reisner Jr., vice president, is client contact.

### Bollinger & Co. Inc.

717 17th St. Suite 1535, Denver, Colo. 80202; (303) 292-0147

| | |
|---|---|
| Total assets managed | $106,000,000 |
| Tax-exempt assets managed | $77,000,000 |
| Real estate assets managed | $3,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 14 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

Bollinger & Co. Inc. is an equity, fixed-income and balanced manager.

Its equity approach emphasizes growth stocks, sector rotation and market timing. Its fixed-income approach uses interest rate anticipation.

The firm follows 70 stocks closely and 150, generally; 20% of research is generated internally.

Clients include Colorado Fire & Police.

Jay Guy Bollinger, president, is chief investment officer and client contact.

### Bolton Tremblay Inc.

70 University Ave. Suite 1000, Toronto, Ontario M5J 2M4; (416) 595-5201

| | |
|---|---|
| Total assets managed | $2,500,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,450,000,000 |
| For subsidiaries of U.S. firms | $100,000,000 |
| Real estate assets managed | $30,000,000 |
| Non-North American assets | $200,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 98 |
| U.S. subsidiaries | 1 |
| Types of accounts managed | CEGFU |
| No. of portfolio managers | 15 |

Bolton Tremblay Inc., a Canadian firm, is an equity, fixed-income, balanced, pooled and mutual fund manager.

Its equity approach is value-oriented, using a combination of large- and medium-cap, low p/e issues undervalued on a fundamental basis.

Its fixed-income approach is active, with portfolios managed aggressively based on the interest rate outlook and spread trading.

The asset mix Jan. 1 was 37% Canadian stocks, 10% U.S. stocks, 46% bonds and 7% cash; the bond allocation includes $30 million in mortgage-backed securities.

It follows 50 stocks closely and 200, generally; 10% of research is generated internally.

The parent company is Prenor Financial Ltd.

Clients include McGill University, Rowntree Mackintosh and New Brunswick Workers' Compensation Board.

Jean-Luc Landry, president, is chief investment officer; Ian T. Scott, senior vice president, is client contact.

### Bondoux & Lockwood Investment Counsel

100 Spear St. Suite 850, San Francisco, Calif. 94105; (415) 974-5585

| | |
|---|---|
| Total assets managed | $30,000,000 |
| Tax-exempt assets managed | $10,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 5 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |

Bondoux & Lockwood Investment Counsel is an equity, fixed-income and balanced manager.

It uses both fundamental and technical stock selection methods to achieve total return objectives. Sell disciplines are strongly emphasized to lock in favorable price movements and to preserve asset values in declining markets. Its fixed-income approach uses monetary models to determine interest rate direction and designs portfolios accordingly.

Kathryn W. Bondoux is chief investment officer; Brian A. Lockwood is client contact.

**Key to abbreviations**

C: Corporate account
E: Educational endowments
F: Private foundations
G: U.S. state and local gov'ts
J: Jointly trusteed
P: Canadian provincial gov'ts
U: Unions (Canadian firms only)

### Bostian Research Associates Inc.

360 Madison Ave., New York, N.Y. 10017; (212) 907-0180

| | |
|---|---|
| Total assets managed | $6,000,000 |
| Tax-exempt assets managed | $4,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 3 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

Bostian Research Associates Inc., an equity manager, uses both sector rotation and tactical asset allocation. Its portfolios are managed using proprietary fundamental and quantitative stock selection screens with a tactical asset allocation overlay that employs both economic and quantitative models.

Clients include Loews, Honeywell and Eastman Kodak.

David B. Bostian Jr. is chief investment officer; Howard Winell, executive vice president, is client contact.

### The Boston Co. Inc.

1 Boston Place, Boston, Mass. 02106; (800) 225-5267

| | |
|---|---|
| Total assets managed | $21,188,000,000 |
| Tax-exempt assets managed | $15,572,000,000 |
| 401(k)/457 assets managed | $143,000,000 |
| 401(k)/457 clients | 1 |
| Real estate assets managed | $2,164,000,000 |
| International assets managed | $151,000,000 |
| Index funds managed | $408,000,000 |
| Dedicated funds managed | $105,000,000 |
| Tax-exempt clients | 189 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 26 |
| Size of research staff | 18 |

The Boston Co. Inc. is an equity, fixed-income, balanced, real estate and international manager.

Its active equity management approach uses quantitative value-oriented screening and emphasizes stocks undervalued in earnings and dividend growth, with appreciation potential. Its index funds track the S&P 500, Wilshire 5000 and MSCI indexes.

Its active fixed-income approach emphasizes interest rate anticipation, avoiding extreme strategies. Portfolios are positioned with the best relative value as to industry and quality sectors. Its passive approach uses debt securities to meet client needs, tracking the Shearson-Lehman Aggregate index or its components. Options and stock index futures are used.

In real estate, most assets are managed on a separate account basis by The Boston Co. Real Estate Council Inc., with the primary investment vehicle equity-oriented debt.

The asset mix Jan. 1 was 40.5% stocks, 23.9% bonds, 0.5% cash, 13.8% equity real estate and 21.3% short-term money market investments.

The parent company is Shearson Lehman Hutton, an American Express Co. unit.

James Von Germeten, president, is chief investment officer; John L. Carty, vice president and director of marketing and client relations management, is client contact.

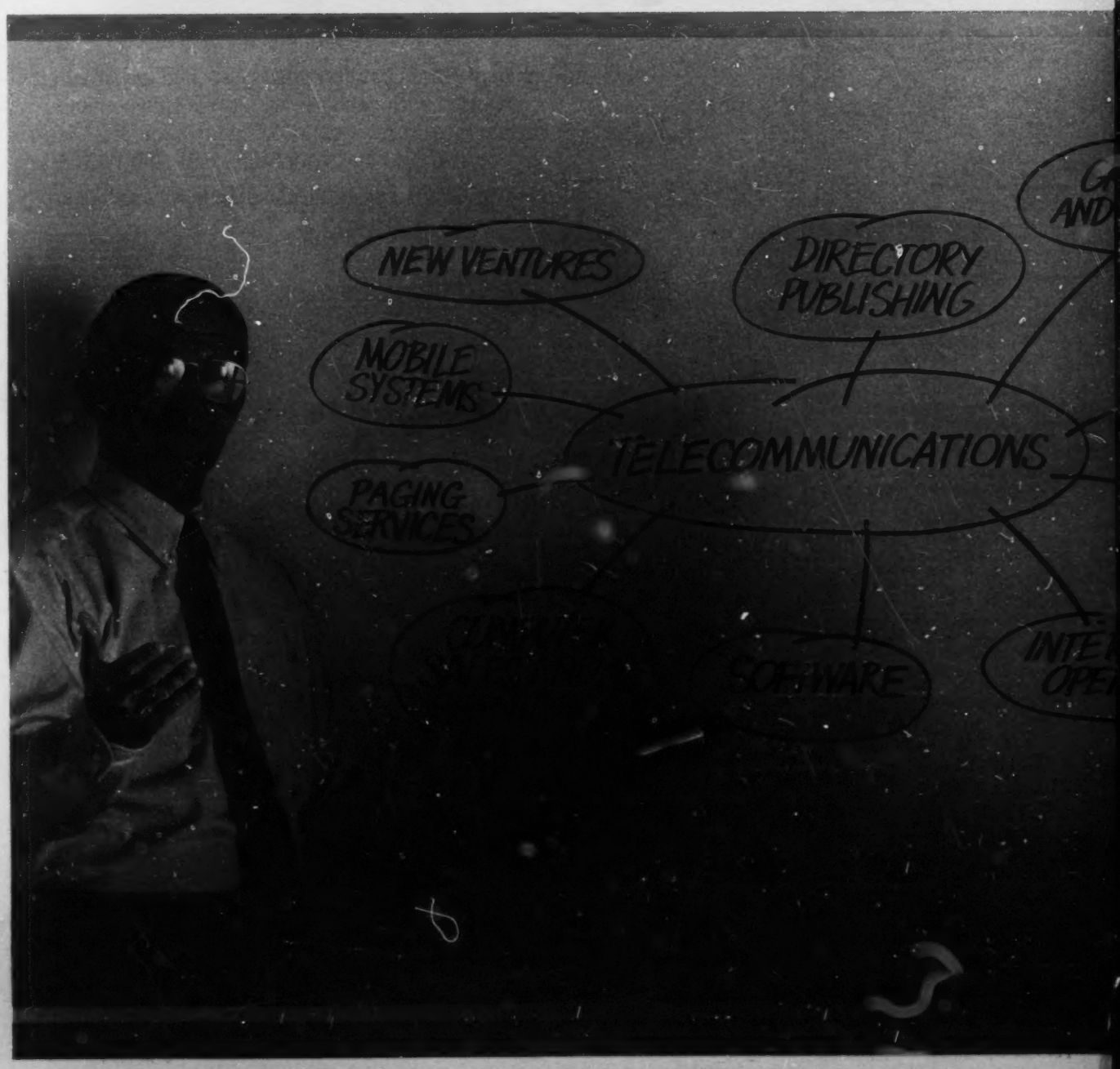
### Boston International Advisors Inc.

1 Liberty Square, Boston, Mass. 02109; (617) 574-9050

| | |
|---|---|
| Total assets managed | $165,000,000 |
| Tax-exempt assets managed | $143,000,000 |
| International assets managed | $83,000,000 |
| Index funds managed | $60,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 3 |
| Types of accounts managed | CG |
| No. of portfolio managers | 5 |

Boston International Advisors Inc., an international equity manager, uses quantitative value techniques to allocate among the EAFE markets and to

BellSouth



select stocks within those markets. The firm also manages custom index funds — EAFE, GDP and South Africa-free. Stock index futures are used.

Clients include Connecticut and Federated Department Stores.

Lyle H. Davis, managing director, is chief investment officer; Jennifer Dunning, managing director, is client contact.

### Boston Security Counsellors

60 State St., Boston, Mass. 02109; (617) 742-9858

| | |
|---|---|
| Total assets managed | $450,000,000 |
| Tax-exempt assets managed | $180,000,000 |
| Real estate assets managed | $9,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 40 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 5 |
| Size of research staff | 2 |

Boston Security Counsellors Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses both Graham & Dodd and quantitative techniques in selecting growth, emerging growth and low p/e stocks based on criteria measuring value, growth and financial strength. Using interest rate anticipation, the firm selects fixed-income securities with the objective of maintaining high yield and enhancing market value. Options and fixed-income futures are used.

The parent is Advest Group.

Edward B. White is chief investment officer; Lisa Castellano, director of managed account marketing, is client contact.

### Bounty Management Corp.

The Bedford Building, 99 Bedford St., Boston, Mass. 02111; (617) 357-8285

| | |
|---|---|
| Total assets managed | $110,000,000 |
| Tax-exempt assets managed | $72,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 78 |
| Types of accounts managed | CE |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

Bounty Management Corp. is an equity and balanced manager.

Its equity strategy is quantitative, combining momentum and value investing based on a contrarian approach.

In fixed income, it swings in and out on the Treasury yield curve based on year-to-year interest rate forecasts for long-term investments only.

Clients include Crozer Theological Seminary and The Charlton School.

Raymond N. Bligh, president, is chief investment officer and client contact.

### Bowen, Hanes & Co. Inc.

100 Galleria Parkway, Suite 670, Atlanta, Ga. 30339; (404) 951-8891

| | |
|---|---|
| Total assets managed | $550,000,000 |
| Tax-exempt assets managed | $410,000,000 |
| Real estate assets managed | $5,000,000 |
| Minimum separate account | $1,000,000 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Bowen, Hanes & Co. Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses low p/e and growth stocks. The firm uses a conservative, quality-oriented, top-down approach.

Its fixed-income approach is based on interest rate anticipation.

In real estate, it seeks capital gains opportunities in undeveloped land.

The firm follows 50 stocks closely and 200, generally; 90% of research is generated internally.

Clients include Tampa Firefighters & Police Officers, University of the South Endowment Fund and Classic Leather.

Harold J. Bowen is chief investment officer; Jay Bowen is the client contact.

### Bowman Financial Management Co. Inc.

1013 N. Calvert St., Baltimore, Md. 21202; (301) 685-0234

| | |
|---|---|
| Total assets managed | $94,000,000 |
| Tax-exempt assets managed | $50,000,000 |
| Minimum separate account | $400,000 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

Bowman Financial Management Co. Inc. is an equity, fixed-income, balanced and real estate manager.

Its equity approach uses Graham & Dodd analysis, focusing on growth, emerging growth and low p/e stocks.

The fixed-income approach uses interest rate anticipation and qualitative analysis.

Its real estate approach is trend management analysis.

The firm follows 200 stocks closely and 200 generally; 50% of the research is generated internally.

Donald E. Bowman, president, is the chief investment officer and client contact.

### G. Waring Boys Co. Inc.

P.O. Drawer 5255, Asheville, N.C. 28813; (704) 274-1542

| | |
|---|---|
| Total assets managed | $153,000,000 |
| Tax-exempt assets managed | $72,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 53 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

The G. Waring Boys Co. Inc. is an equity, fixed-income and balanced manager.

Emphasizing low p/e and growth stocks and market timing, its equity approach is value-oriented, fundamental and disciplined.

Its fixed-income approach is driven by interest rate anticipation, emphasizing high quality, liquidity and sector and maturity diversification.

G. Waring Boys, president, is chief investment officer; John B. Kuhns is client contact.

### Brandes Investment Management Inc.

12760 High Bluff Drive Suite 160, San Diego, Calif. 92130; (619) 755-0239

| | |
|---|---|
| Total assets managed | $100,000,000 |
| Tax-exempt assets managed | $38,000,000 |
| International assets managed | $13,000,000 |
| Minimum separate account | $400,000 |
| Tax-exempt clients | 180 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 4 |
| Size of research staff | 2 |

Brandes Investment Management Inc., an equity and international manager, takes an approach that is global and value-oriented, using Graham & Dodd analysis to identify undervalued securities.

The firm follows 50 stocks closely and 100 generally; all research is generated internally.

Charles H. Brandes, president, is chief investment officer; W. Roberts Wood is client contact.

### Brandywine Asset Management

The Pennsylvania Building Suite 400, 110 S. French St., Wilmington, Del. 19801; (302) 654-6162

| | |
|---|---|
| Total assets managed | $340,000,000 |
| Tax-exempt assets managed | $318,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 13 |
| Types of accounts managed | CEJG |
| No. of portfolio managers | 5 |

Brandywine Asset Management, an equity manager, invests exclusively in the lowest 20% of the p/e spectrum, producing consistent returns in excess of the market with controlled volatility.

The firm follows 160 stocks closely; 70% of research is generated internally.

Clients include Westinghouse, University of Richmond, Pittsburgh Symphony Society and Eastern Airlines.

W. Anthony Hitschler is chief investment officer; Frank G. Frey and M. Andrew Sheffler are the client contacts.

### Stacey Braun Associates

377 Broadway Eighth Floor, New York, N.Y. 10013; (212) 226-7707

| | |
|---|---|
| Total assets managed | $1,110,000,000 |
| Tax-exempt assets managed | $1,110,000,000 |
| Real estate assets managed | $222,000,000 |
| International assets managed | $5,000,000 |


# 1S growing by design.

BellSouth's telephone operating companies, Southern Bell and South Central Bell, continue their remarkable growth, offering new products and services to an expanding customer base of over 14 million homes and businesses.

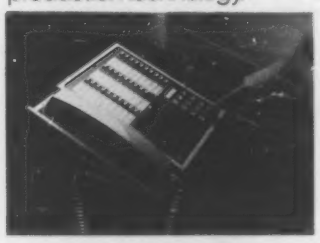
At the same time, BellSouth is committed to growth through developing new businesses that are a natural outgrowth of BellSouth's telecommunications expertise.

On January 1, 1986, BellSouth Enterprises was formed. Its purpose: To direct all BellSouth subsidiaries in businesses other than regulated services provided by Southern Bell and South Central Bell.

Today BellSouth Enterprises consists of three groups comprising a rapidly growing number of companies and joint ventures operating throughout the U.S. and around the world.

**An Industry Leader In Directory Advertising And Publishing**

The companies of the BellSouth Advertising and Publishing Group include the leading publisher of traditional and specialized directories. In addition, these vertically integrated companies also offer expertise in advertising sales, computer-based pre-press production and photocomposition, graphics, printing and binding, and are on the leading edge of four-color print production technology.



**Helping Companies To Manage Information**

The BellSouth Communications Systems Group markets the products and services that keep BellSouth in the forefront of the telecommunications industry. Throughout the U.S. and Europe, the Group offers a range of products from office automation equipment to computer leasing and maintenance.

**Focusing On The Booming Cellular Market**

The companies of the BellSouth Mobile Systems/International Group focus primarily on the rapidly growing mobile telephone market. Already in many major American cities, BellSouth companies and joint ventures are quickly penetrating cellular phone markets in England, Western Europe and Australia.

In the years to come, BellSouth Enterprises will continue to play an important role in BellSouth's commitment to maintain high service standards, to emphasize telecommunications and to pursue orderly corporate growth. With such a strategy, it's no wonder the future looks so exciting for BellSouth.

SOUTH CENTRAL BELL • SOUTHERN BELL
BELLSOUTH SERVICES
BELLSOUTH ENTERPRISES
COMMUNICATIONS SYSTEMS GROUP
BellSouth Advanced Systems • BellSouth Government Systems • BellSouth Systems Technology • Dataserv, Inc. • Universal Communications Systems
MOBILE SYSTEMS/INTERNATIONAL GROUP
BellSouth Mobility • BellSouth International • American Cellular Communications • Link Telecommunications
ADVERTISING AND PUBLISHING GROUP
BellSouth Advertising & Publishing Corporation • L.M. Berry and Company • BellSouth Information Systems • Stevens Graphics • TechSouth, Inc.
OTHER COMPANIES
BellSouth Advanced Networks • BellSouth Educational Services

**BELLSOUTH**

Shaping the future of telecommunications℠

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| | |
|---|---|
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 125 |
| Types of accounts managed | CJ |
| No. of portfolio managers | 5 |

Stacey Braun Associates Inc., is an equity, fixed-income and balanced manager.

Its equity approach uses Graham & Dodd-based analysis. The major criteria in selection are reasonably consistent earnings growth, low p/e, multiples and dependable dividends for above-average yields.

Its fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 25% stocks, 39% bonds, 16% cash and 20% mortgage-backed securities. As of the same date, the firm had $6 million in foreign bonds.

The firm follows 108 stocks closely and 193, generally.

Clients include Laborers National Pension Fund, UPS Union, and American Guild of Musical Artists.

Martin H. Wexler, president, is the chief investment officer and client contact.

## Breau Capital Management

800 South St., Waltham, Mass. 02154; (617) 893-0600

| | |
|---|---|
| Total assets managed | $141,000,000 |
| Tax-exempt assets managed | $141,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 9 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Breau Capital Management Inc., an equity manager, holds value-oriented portfolios emphasizing low p/e and price-to-book multiples, overlooked companies and undervalued assets.

The firm follows 100 stocks closely and 400, generally; 70% of research is generated internally.

Clients include Aerospace, Ideal Basic and Martin Marietta.

Edward P. Breau, president, is chief investment officer and client contact.

## Daniel Breen & Co.

700 Louisiana, 3400 RepublicBank Center, Houston, Texas 77002; (713) 223-2110

| | |
|---|---|
| Total assets managed | $1,004,000,000 |
| Tax-exempt assets managed | $896,000,000 |
| Tax-exempt clients | 40 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 4 |

Daniel Breen & Co. is an equity, fixed-income and balanced manager.

Its equity approach uses a two-pronged, top-down approach by: identifying the stock market environment as p/e or earnings expectations driven; and analyzing valuation discrepancies based on market capitalization. This is combined with bottom-up selection of issues. Valuation work is based on historical, relative and absolute measures. Options are used.

Its fixed-income approach is based on interest rate anticipation using economic judgment, correlation models and other tools to determine appropriate duration and maturity. The firm invests primarily in Treasury securities.

The asset mix Jan. 1 was 49% stocks, 37% bonds and 14% cash.

Daniel A. Breen, president, and Harry M. Flavin, senior vice president, are chief investment officers; Edward S. McCullough is senior vice president and client contact.

## Bridge Capital Advisors Inc.

Glenpointe Centre West, Teaneck, N.J. 07666; (201) 836-3900

| | |
|---|---|
| Total assets managed | $150,000,000 |
| Tax-exempt assets managed | $105,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 17 |
| Types of accounts managed | CFJG |
| No. of portfolio managers | 5 |

Bridge Capital Advisors Inc. is a manager of expansion capital for expanding companies. It uses debt instruments with current return and equity features. Goals include a current return of approximately 10% and a total return between 25% and 30%. Virtually all investments are done privately.

William Spencer is the chairman of the investment committee; Hoyt Goodrich is client contact.

## Bridgewater Associates

372 Danbury Road, Wilton, Conn. 06897; (203) 762-8511

| | |
|---|---|
| Total assets managed | $700,000,000 |
| Tax-exempt assets managed | $40,000,000 |
| International assets managed | $10,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 4 |
| Types of accounts managed | CF |
| No. of portfolio managers | 3 |
| Size of research staff | 3 |

Bridgewater Associates is a fixed-income and global asset manager.

Its investment approach evaluates the relative merits of major markets using fundamental and technical systems that monitor economic conditions and identify changes. The firm will go short at customer request. Options, stock index futures and fixed-income futures are used.

The parent is Bridgewater Group.

Clients include The World Bank and Singer.

Ray Dalio, president, is the chief investment officer; Giselle Wagner, vice president, is the client contact.

## Brignoli, Curley & Roberts Associates

15 W. 39th St. Suite 300, New York, N.Y. 10018; (212) 869-4233

| | |
|---|---|
| Total assets managed | $826,000,000 |
| Tax-exempt assets managed | $826,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 16 |
| Types of accounts managed | C |
| Size of research staff | 4 |

Brignoli, Curley & Roberts Associates, a quantitative equity manager, uses a low-risk, fully invested program designed to provide incremental return by capturing a portion of the volatility of individual securities in a portfolio with a sophisticated diversification technique and a disciplined trading strategy.

The asset mix Jan. 1 was 99% stocks and 1% cash.

All research is generated internally.

The parent is Brignoli, Curley Inc.

Clients include Eastman Kodak, Johnson & Johnson, Westinghouse and Yale.

Robert L. Hunt is chief investment officer; Bruce Kerr, vice president-marketing, is client contact.

## John W. Bristol & Co. Inc.

233 Broadway, New York, N.Y. 10279; (212) 267-9000

| | |
|---|---|
| Total assets managed | $1,900,000,000 |
| Tax-exempt assets managed | $1,700,000,000 |
| 401(k)/457 assets managed | $13,000,000 |
| 401(k)/457 clients | 1 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 30 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 5 |

John W. Bristol & Co. Inc. is an equity, fixed-income and balanced manager.

Its equity approach relies on growth stocks, while its fixed-income approach focuses on interest rate anticipation.

The asset mix Jan. 1 was 80% stocks, 15% bonds and 5% cash.

The firm follows 60 stocks closely and 200 generally; all research is generated internally.

Clients include Princeton University, Swarthmore College, Colorado College and Clark Art Institute.

Charles H. Mott, president, is chief investment officer and client contact.

## Robert C. Brown & Co. Inc.

655 Montgomery St., Suite 810, San Francisco, Calif. 94111; (415) 981-4050

| | |
|---|---|
| Total assets managed | $1,277,000,000 |
| Tax-exempt assets managed | $1,179,000,000 |
| 401(k)/457 assets managed | $46,000,000 |
| 401(k)/457 clients | 2 |
| Dedicated funds managed | $308,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 19 |
| Types of accounts managed | CFJ |
| No. of portfolio managers | 5 |
| Size of research staff | 1 |

Robert C. Brown & Co. Inc. is a fixed-income and cash manager that also offers economic and financial market consulting.

Its fixed-income approach is driven by interest rate anticipation. Its objectives are to conserve principal and maximize total rate of return; volatility of security markets provide opportunities for incremental portfolio performance through disciplined, active management. Fixed income futures are used.

The asset mix Jan. 1 was 90% bonds and 10% cash.

Clients include Boeing, Occidental Petroleum, Idaho Power and Hercules.

Eugene Y. Chow is chief investment officer; Donald C. De Lutis is client contact.

## Brown Brothers Harriman

59 Wall St., New York, N.Y. 10005; (212) 493-8331

| | |
|---|---|
| Total assets managed | $11,687,000,000 |
| Tax-exempt assets managed | $8,406,000,000 |
| International assets managed | $549,000,000 |
| Dedicated funds managed | $50,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 454 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 70 |
| Size of research staff | 25 |

Brown Brothers Harriman & Co. is an equity, fixed-income, balanced and international manager.

Based on sector rotation and Graham & Dodd analysis, its equity approach uses stock selection, diversification and market timing for equity accounts and equity components of balanced accounts.

Its fixed-income approach is based on duration. This approach incorporates the three variables that control the price volatility of a bond: maturity, coupon and yield to maturity. It also provides linear proportionality among the duration of various bonds.

Options, stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 26% stocks, 63% bonds and 11% cash; $523 million was in foreign stocks and $26 million in foreign bonds.

The firm follows 280 stocks closely and 500, generally; 80% of the research is generated internally.

Elbridge T. Gerry Jr., is chief investment officer; Paul A. Legvold is the client contact.

## Alex. Brown Investment Management

135 E. Baltimore St., Baltimore, Md. 21203; (301) 727-1700

| | |
|---|---|
| Total assets managed | $900,000,000 |
| Tax-exempt assets managed | $800,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 66 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 4 |
| Size of research staff | 2 |

Alex. Brown Investment Management is an equity and balanced manager.

Its equity approach is based on flexible stock selection with a focus on overlooked or out-of-favor stocks where favorable changes are creating significant appreciation potential.

Its fixed-income approach also is flexible. It uses government and corporate bonds, emphasizing quality issues with intermediate maturities.

The asset mix Jan. 1 was 65% stocks, 15% bonds and 20% cash.

The firm follows 100 stocks closely and 200, generally; 50% of the research is generated internally.

The parent company is Alex. Brown and Sons Inc.

Clients include Alton Jones Foundation, Baltimore County, Johns Hopkins Hospital and Monumental Corp.

J. Dorsey Brown III is chief investment officer and client contact.

## Alex. Brown Realty Advisors

225 E. Redwood St., Baltimore, Md. 21202; (301) 727-3884

| | |
|---|---|
| Total assets managed | $1,396,000,000 |
| Tax-exempt assets managed | $994,000,000 |
| Real estate assets managed | $994,000,000 |
| Minimum separate account | $50,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | G |
| No. of portfolio managers | 4 |
| Size of research staff | 3 |

Alex. Brown Realty Advisors Inc., a real estate manager, represents clients in direct real estate investments.

The asset mix Jan. 1 was 97% equity real estate and 3% mortgages.

The firm follows 40 real estate securities closely and 130, generally; 75% of research is generated internally.

The parent company is Alex. Brown & Sons Inc.

John W. Guinee is chief investment officer; Mahlon Apgar IV, managing director-realty services, is client contact.

## Brundage, Story and Rose

1 Broadway, New York, N.Y. 10004; (212) 269-3050

| | |
|---|---|
| Total assets managed | $2,896,000,000 |
| Tax-exempt assets managed | $1,407,000,000 |
| International assets managed | $33,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 117 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 19 |

Brundage, Story and Rose is an equity and balanced manager.

Its equity approach combines Graham & Dodd analysis with growth stock and value strategies. It uses a top-down, long-term fundamental method emphasizing capital preservation.

Its fixed-income approach is based on interest rate anticipation. Managers purchase high-quality securities — primarily U.S. government — in the one- to five-year maturity range to provide stability and additional income.

The asset mix Jan. 1 was 75% stocks, 14% bonds and 11% cash. As of the same date, $33.4 million was in foreign stocks.

The firm follows 250 stocks closely and 350, generally; 75% of research is generated internally.

Clients include Ohio Operating Engineers, Perkin Elmer, Westvaco and Vermont State.

Malcolm D. Clarke and Charles G. Watson are the chief investment officers; Donald F. Daly is the client contact.

## Burgess Capital Corp.

499 Seaport Court Suite 201, Redwood City, Calif. 94063; (415) 369-4545

| | |
|---|---|
| Total assets managed | $100,000,000 |
| Tax-exempt assets managed | $42,000,000 |
| International assets managed | $10,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 20 |
| Types of accounts managed | CFJ |
| No. of portfolio managers | 3 |

Burgess Capital Corp. is an equity, fixed-income, balanced and international manager.


THE OTC-100℠ FUND

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It is a risk-averse global money manager with capital preservation and consistent long-term growth as its primary objectives. Its equity approach combines growth and emerging growth stocks, market timing and quantitative and value analyses.

Fixed-income investments, based on interest rate anticipation, are dictated by client needs for income or balanced portfolios.

Robert F. Burgess, president, is chief investment officer; Robert F. Osborne, executive vice president, is client contact.

### Burnham and Co.

202 Federal Square Building, Grand Rapids, Mich. 49503; (616) 459-1043

| | |
|---|---|
| Total assets managed | $360,000,000 |
| Tax-exempt assets managed | $191,000,000 |
| Real estate assets managed | $8,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 90 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 2 |
| Size of research staff | 3 |

Burnham and Co. is an equity, fixed-income and balanced manager.

Its equity approach relies on emerging growth and growth stocks, while its fixed-income approach focuses on interest rate anticipation and sector analysis. Options are used.

The firm follows 150 stocks closely and 300, generally; 20% of research is generated internally.

Clients include Oakland County, Kalamazoo County and Hope College.

Robert W. Burnham, president, is chief investment officer and client contact.

### Burridge Group Inc.

115 S. LaSalle St., Suite 2280, Chicago, Ill. 60603; (312) 368-0066

| | |
|---|---|
| Total assets managed | $225,000,000 |
| Tax-exempt assets managed | $171,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 12 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 2 |

The Burridge Group Inc. is an equity, fixed-income and balanced manager.

Its equity approach relies on emerging growth and growth stocks. Large- and small-cap growth companies represent 70% to 75% of a portfolio, and opportunistic stocks, 25% to 30%. Holding periods are three to five years.

Its fixed-income approach concentrates on interest rate anticipation.

The firm follows 100 stocks closely; 20% of research is done internally.

Clients include Roosevelt University, Microdot and RGK Foundation.

Richard Burridge, president, is chief investment officer; Jack Tuhey, executive vice president, is client contact.

### BZW Investment Management

P.O. Box 439, Seal House 1 Swan Lane, London EC4R 3UD U.K.; 01-623-7777

| | |
|---|---|
| Total assets managed | $19,837,000,000 |
| Tax-exempt assets managed | $84,000,000 |
| International assets managed | $24,000,000 |
| Tax-exempt clients | 1 |
| Types of accounts managed | C |
| No. of portfolio managers | 51 |
| Size of research staff | 3 |

BZW Investment Management is an equity, fixed-income, balanced, real estate, international, GIC and quantitative (indexed) manager.

In equities, the firm offers a range of segregated and quantitative techniques blended to meet the needs of each client. Its fixed-income approach is based on interest rate anticipation and sector analysis. Options are used.

The parent company is Barclays PLC.

Donald Brydon, director, is chief investment officer; Jane Platt, director, is client contact.

**Key to abbreviations**
C: Corporate account
E: Educational endowments
F: Private foundations
G: U.S. state and local gov'ts
J: Jointly trusteed
P: Canadian provincial gov'ts
U: Unions (Canadian firms only)

## C

### Cabot, Cabot & Forbes Realty Advisors Inc.

60 State St., Boston, Mass. 02109; (617) 722-8200

| | |
|---|---|
| Total assets managed | $500,000,000 |
| Tax-exempt assets managed | $500,000,000 |
| Real estate assets managed | $500,000,000 |
| Minimum separate account | $100,000,000 |
| Tax-exempt clients | 6 |
| Types of accounts managed | CEFG |

Cabot, Cabot & Forbes Realty Advisors Inc. is a real estate manager.

Its approach uses separate account management of equity real estate portfolios of office and industrial properties.

All assets were invested in equity real estate Jan. 1.

The parent company is Cabot, Cabot & Forbes Group of Cos.

Clients include BellSouth, IBM and Kodak.

Ferdinand Colloredo-Mansfeld is chief investment officer; Robert M. Angland, executive vice president, is client contact.

### Cadinha & Co. Inc.

Suite 1240, 900 Fort Street Mall, Honolulu, Hawaii 96813; (808) 523-9488

| | |
|---|---|
| Total assets managed | $180,000,000 |
| Tax-exempt assets managed | $119,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 92 |
| Types of accounts managed | CEJG |
| No. of portfolio managers | 4 |
| Size of research staff | 1 |

Cadinha & Co. Inc. is an equity, fixed-income and balanced manager.

Its equity approach is based on growth stocks, using fundamental analysis in determining companies' anticipated growth.

Its fixed-income approach uses interest rate anticipation, with yield curve analysis determining the proper maturity placement of high-quality debt.

Harlan J. Cadinha, president, is the chief investment officer; Janis C. Akuna, vice president, is the client contact.

### Calamos Asset Management

2001 Spring Road, Suite 750, Oak Brook, Ill. 60521; (312) 571-7115

| | |
|---|---|
| Total assets managed | $231,000,000 |
| Tax-exempt assets managed | $139,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 94 |
| Types of accounts managed | CJ |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

Calamos Asset Management Inc. specializes in convertible securities.

Using 30 quantitative and statistical measures, it evaluates risk/reward for convertible securities with a fundamental bias. Options are used.

Clients include Illinois State Board of Investments, UFCW Local 1262 and Zeigler Coal.

John P. Calamos, president and managing director, is the chief investment officer; Joyce A. Cagnina, senior vice president and director of marketing, is the client contact.

### Calcasieu Marine National Bank

P.O. Box 3403, Lake Charles, La. 70602; (318) 494-3319

| | |
|---|---|
| Total assets managed | $61,000,000 |
| Tax-exempt assets managed: | |
| Total | $33,000,000 |
| Commingled | $12,000,000 |
| Separate | $21,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients: | |
| Commingled | 42 |
| Separate | 11 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 1 |

Calcasieu Marine National Bank is an equity, fixed-income and balanced manager.

Its equity approach uses growth, emerging growth and low p/e stocks,


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28 West State Street, Trenton, New Jersey 08680, (609) 599-5950.

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Sharing Opportunities

The Bear Stearns Companies Inc., 245 Park Avenue, New York, New York 10167.

sector rotation and market timing. Options and stock index futures are used.

Its fixed-income approach is based on interest rate anticipation.

The parent is Burton Industries.

James E. Rickenbacker, trust investment officer, is chief investment officer; Fred Lee, vice president-trust marketing, is client contact.

## California First Bank

530 B St., P.O. Box 109; San Diego, Calif. 92112; (619) 230-4700

| | |
|---|---|
| Total assets managed | $1,011,000,000 |
| Tax-exempt assets managed: | |
| Total | $345,000,000 |
| Commingled | $267,000,000 |
| Separate | $78,000,000 |
| Real estate assets managed | $15,000,000 |
| International assets managed | $8,000,000 |
| Indexed assets managed | $11,000,000 |
| Dedicated assets managed | $11,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 510 |
| Separate | 10 |
| Types of accounts managed | CF |
| No. of portfolio managers | 7 |
| Size of research staff | 4 |

California First Bank is an equity, fixed-income, balanced, real estate, international and GIC manager.

Its equity approach is passive and value-oriented. Its style is a combination of economically driven top-down methods enhanced by established and anticipated earnings momentum coupled with relative valuation.

Its fixed-income approach is an economically driven top-down style that forecasts major trends in inflation, growth and interest rates. The average maturity is adjusted to reflect its economic outlook.

Options are used.

Kenneth Sanders, vice president and manager, is chief investment officer; Christiaan M. de Greef, vice president-marketing, is client contact.

## Cambiar Investors Inc.

8400 E. Prentice Ave. Suite 460, Englewood, Colo. 80111; (303) 393-3931

| | |
|---|---|
| Total assets managed | $320,000,000 |
| Tax-exempt assets managed | $255,000,000 |
| International assets managed | $6,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 15 |
| Types of accounts managed | CFG |
| No. of portfolio managers | 5 |

Cambiar Investors Inc. is an equity manager.

Focusing on growth and low p/e stocks, Cambiar uses relative valuation screens and fundamental analysis to identify sound companies at positive inflection points for a minimum 50% appreciation potential.

Clients include Allegis, San Antonio City and Boeing.

Michael S. Barish, president, is the chief investment officer. The client contact is James C. Vogelzang, Vogelzang & Associates Inc., 600 17th St., Suite 2325S, Denver, Colo. 80202; (303) 629-1900.

## Cambier Investment Management

140 Town & Country Drive, Suite B, Danville, Calif. 94526; (415) 820-1164

| | |
|---|---|
| Total assets managed | $7,000,000 |
| Tax-exempt assets managed | $4,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 8 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 1 |

Cambier Investment Management is an equity and balanced manager.

Its equity approach blends fundamental and technical analysis to find undervalued long-term investments. The fixed-income approach uses sector analysis.

The firm follows 40 stocks closely and 700, generally; 40% of research is generated internally.

James T. Cambier is chief investment officer and client contact.

## Cambridge Realty Capital Advisors Ltd.

200 W. Superior, Suite 303, Chicago, Ill. 60610; (312) 943-1911

| | |
|---|---|
| Total assets managed | $50,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $1,000,000 |
| No. of portfolio managers | 1 |
| Size of research staff | 3 |

Cambridge Realty Capital Advisors Ltd., a real estate manager, seeks medium to long-term appreciation through investing in growth sectors of stable, established markets.

The firm generates 25% of its research internally.

Andrew L. Erkes is chief investment officer; Jeffrey A. Davis, president, is client contact.

## Campbell Advisors Inc.

530 Fifth Ave., New York, N.Y. 10036; (212) 921-9009

| | |
|---|---|
| Total assets managed | $560,000,000 |
| Tax-exempt assets managed | $442,000,000 |
| International assets managed | $5,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 18 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 5 |

Campbell Advisors Inc. is an equity, balanced and income/growth product manager.

Its sector rotational equity approach is based on growth and emerging growth stocks. Its fixed-income approach uses interest rate anticipation.

The firm follows 100 stocks closely and 250, generally; 50% of research is generated internally.

Douglas Campbell Jr. is chief investment officer; Kenneth C. Swenson, vice president, is client contact.

## Campbell, Cowperthwait

215 E. 49th St., New York, N.Y. 10017; (212) 421-3561

| | |
|---|---|
| Total assets managed | $135,000,000 |
| Tax-exempt assets managed | $20,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 2 |

Campbell, Cowperthwait & Co. Inc., primarily an equity manager, focuses equity investments on growth stocks. The firm's fixed-income approach is passive.

The firm follows 25 stocks closely and 50, generally.

William G. Campbell is chief investment officer; Margaret R. McInnis is client contact.

## The Campbell Group Inc.

1 S.W. Columbia Suite 1720, Portland, Ore. 97258; (503) 275-9675

| | |
|---|---|
| Total assets managed | $66,000,000 |
| Tax-exempt assets managed | $58,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 5 |
| Types of accounts managed | C |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

The Campbell Group Inc., a timberland acquisition and management firm, purchases timberland at discount from current prices. It harvests at the optimum realization considering growth, maturity, export/domestic demand conditions and market prices.

Clients include John Hancock Insurance.

J. Duncan Campbell Jr., president, is chief investment officer; Mark L. Wysong, executive vice president, is client contact.

## Campbell, Newman, Pottinger & Associates

11039 N. Towne Square Road, Mequon, Wis. 53092; (414) 241-6620

| | |
|---|---|
| Total assets managed | $260,000,000 |
| Tax-exempt assets managed | $100,000,000 |
| Real estate assets managed | $2,000,000 |
| International assets managed | $2,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 30 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

Campbell, Newman, Pottinger & Associates Inc. is an equity, fixed-income and balanced manager.

In equities it uses a Graham & Dodd approach to identify undervalued growth and low p/e stocks. Market timing is also used.

In fixed income, accounts have adjusted portfolio durations based upon the outlook or trend in interest rates. Passive income approaches are used depending upon client proscriptions.

Leonard Campbell Jr., is the chief investment officer and client contact.

## Campbell, Reed, Conner & Birdwell Inc.

11111 Santa Monica Blvd. Suite 1700, Los Angeles, Calif. 90025; (213) 478-4005

| | |
|---|---|
| Total assets managed | $327,000,000 |
| Tax-exempt assets managed | $128,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 21 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 4 |

Campbell, Reed, Conner & Birdwell Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses growth, emerging growth and low p/e stocks with Graham & Dodd analysis as the primary method for security selection.

Its fixed-income approach uses interest rate anticipation and sector analysis with a maturity horizon of 24 to 60 months. Only A or better bonds are considered.

James C. Reed, executive vice president, is the chief investment officer; Neil F. Campbell Jr. is the client contact.

## James Capel Fund Managers

6 Bevis Marks, London, EC3A 7JQ U.K.; 01-621-0011

| | |
|---|---|
| Total assets managed | $1,300,000,000 |
| Tax-exempt assets managed | $28,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | F |
| No. of portfolio managers | 14 |

James Capel Fund Managers Ltd. is an equity, fixed-income, balanced, index and international manager.

It offers both passive and active equity approaches. Its active approach is a top-down allocation based on economic fundamentals and relative market values. Stocks are selected on the basis of low p/e and strong earnings growth. Options and stock index futures are used.

In fixed income, interest rate and exchange rate forecasts are made based on fundamental economic research for a 12-month time horizon. Portfolios are tailored to reflect these forecasts using the highest quality instruments.

The parent company is James Capel Holdings.

Stephen Lofthouse is chief investment officer and client contact.

## Capital Advisors Inc.

275 Hess Blvd. P.O. Box 5367, Lancaster, Pa. 17601; (717) 569-4655

| | |
|---|---|
| Total assets managed | $500,000,000 |
| Tax-exempt assets managed | $500,000,000 |
| 401(k)/457 assets managed | $5,000,000 |
| 401(k)/457 clients | 1 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 7 |
| Types of accounts managed | CG |
| No. of portfolio managers | 2 |

Capital Advisors Inc. specializes in short-term cash management for institutional portfolios. It emphasizes highly liquid (two- to 10-day) high-quality portfolio structures.

All assets were in cash Jan. 1.

Clients include Central and South West Corp., Anderson-Clayton, Houston Industries and Blue Cross Indiana.

George A. Ominski is chief investment officer; Frank L. Iaquinta Jr., managing director, is client contact.

## Capital Advisors Inc.

320 S. Boston Suite 220, Tulsa, Okla. 74103; (918) 599-0045

| | |
|---|---|
| Total assets managed | $420,000,000 |
| Tax-exempt assets managed | $350,000,000 |
| International assets managed | $3,000,000 |
| Index funds managed | $52,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 60 |
| Types of accounts managed | CF |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Capital Advisors Inc. is an equity, fixed-income and balanced manager.

Its equity approach is top-down, combining growth stock, sector rotation and market-timing strategies. Managers seek to detect trends that provide investment opportunities or create added risks.

Its fixed-income approach uses interest rate anticipation for investing in U.S. government, agency and high-quality corporate obligations. Maturities are staggered between one and 10 years.

The firm follows 75 stocks closely and 500, generally; 20% of research is generated internally.

Clients include Oklahoma Teachers, Hinderliter Industries and United Catalysts.

Richard E. Minshall is chief investment officer; Lawrence Field is client contact.

## Capital Consultants Inc.

2300 S.W. First Ave., Portland, Ore. 97201; (503) 241-1200

| | |
|---|---|
| Total assets managed | $503,000,000 |
| Tax-exempt assets managed | $385,000,000 |
| Real estate assets managed | $163,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 82 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 4 |
| Size of research staff | 3 |

Capital Consultants Inc. is an equity, fixed-income, balanced and real estate manager.

Its equity approach is bottom-up (stocks picked through fundamental analysis and ROI; diversified by type, sector and number) and disciplined (multifactor pricing of ROI, fair market value and relative price-to-book ratio). Options are used.

In fixed income, it uses a disciplined approach based on interest rate forecasts and a duration approach, incorporating modest shifts in rate sensitivity and low volatility.

Real estate investments are centered in the West. Minimum equity acquisition is $1 million, specializing in office buildings, shopping centers and industrial properties. Loans vary from $250,000 to $5 million, providing a 10-year payoff.

Gregory J. Houser is executive vice president and chief investment officer; Richard A. Becher, vice president-marketing/client services, is client contact.

## Capital Guardian Trust Co.

333 S. Hope St., Los Angeles, Calif. 90071; (213) 486-9200

| | |
|---|---|
| Total assets managed | $14,122,000,000 |
| Tax-exempt assets managed: | |
| Total | $13,937,000,000 |
| Commingled | $1,480,000,000 |
| Separate | $12,457,000,000 |
| 401(k)/457 assets managed | $38,000,000 |
| 401(k)/457 clients | 1 |
| Real estate assets managed | $418,000,000 |
| International assets managed | $2,846,000,000 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients: | |
| Commingled | 42 |
| Separate | 97 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 15 |
| Size of research staff | 65 |

Capital Guardian Trust Co. is an equity, fixed-income, balanced, international/global and convertibles manager.

Its equity approach is based on thorough, detailed research and analysis with an emphasis on value. Its fixed-income approach is two-thirds interest rate anticipation and one-third security selection. It uses detailed research and analysis with an emphasis on value.

The asset mix Jan. 1 was 77% stocks, 8% bonds, 12% cash and 3% mortgage-backed securities; $2.15 billion was in foreign stocks, $229 million in foreign bonds and $486 million in foreign cash.

The parent company is The Capital Group Inc.

Clients include Ford, U S WEST, Los Angeles County and University of Notre Dame.

Richard C. Barker, president, is chief investment officer; John H. Seiter, senior vice president, is client contact.

## Capital Investment Services of America

700 N. Water St., Suite 325, Milwaukee, Wis. 53202; (414) 278-7744; (800) 345-6462

| | |
|---|---|
| Total assets managed | $375,000,000 |
| Tax-exempt assets managed | $275,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 125 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

Capital Investment Services is an equity, fixed-income and balanced manager.

Its equity approach uses fundamental analysis to identify growth and emerging growth stocks. Sector rotation is also used.

For fixed-income, interest rate anticipation and sector analysis are used, emphasizing quality analysis and risk-averse securities. Options, stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 45% stocks, 45% bonds and 10% cash.

The firm follows 100 stocks closely and 200, generally; 50% of research is generated internally.

The chief investment officer is Clifford T. Nilsen; William C. Ihlenfeld and William R. Sachse, senior vice presidents, are client contacts.

## Capital Management Corp.

417 Central Trust Tower, Cincinnati, Ohio, 45202; (513) 621-7790

| | |
|---|---|
| Total assets managed | $72,000,000 |
| Tax-exempt assets managed | $37,000,000 |
| Dedicated funds managed | $24,000,000 |
| Minimum separate account | $300,000 |
| Tax-exempt clients | 9 |
| Types of accounts managed | CJ |
| No. of portfolio managers | 2 |

Capital Management Corp. is an equity, fixed-income and balanced manager.

Its equity approach uses growth stocks, and is oriented toward conservative growth with emphasis on balance sheet strength and cash flow returns. Options are used.

Fixed-income portfolios are managed primarily on an interest rate anticipation basis with maturities seldom extending beyond 15 years.

Richard T. Miller, president, is chief investment officer and client contact.

## Capital Management International of Deutsche Bank

9 W. 57th St., New York, N.Y. 10019; (212) 832-1630

| | |
|---|---|
| Total assets managed | $2,070,000,000 |
| Tax-exempt assets managed | $269,000,000 |
| International assets managed | $269,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | CG |
| No. of portfolio managers | 16 |

Capital Management International of Deutsche Bank is an equity, fixed-income, balanced and global manager.

Its equity approach is top-down, emphasizing country and currency allocation based on economic and political fundamentals, industrial-sector outlook and analysis. Stock selection is based on value preservation.

In fixed-income, the firm takes a concentrated approach that gives equal weight to currency and interest rate considerations for achieving superior results over U.S. dollar-denominated bond portfolios.

The parent is Deutsche Bank AG.

Rudolf Heinz, executive vice president, is the chief investment officer; Michael Tintelnot, vice president and general manager-client relations, is the client contact.

## Capital Research & Management Co.

333 S. Hope St., Los Angeles, Calif. 90071; (213) 486-9200

| | |
|---|---|
| Total assets managed | $18,312,000,000 |
| Tax-exempt assets managed | $3,031,000,000 |
| 401(k)/457 assets managed | $125,000,000 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients | 1,355 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 15 |
| Size of research staff | 62 |

Capital Research & Management Co. manages U.S. and non-U.S. equity, fixed-income and balanced portfolios, primarily for the American Funds Group of mutual funds.

Its equity approach is fundamental and value oriented, based on thorough, detailed research and analysis.

Its fixed-income approach is based on interest rate anticipation and matu-

rity, sector and credit analysis.

The asset mix Jan. 1 was 69% stocks, 13.7% bonds and 17.3% cash.

The firm follows 600 stocks closely and 1,200 generally.

The firm generates 90% of its research internally.

The parent company is Capital Group Inc.

Clients include American Cyanamid, Chevron, Brunswick, Campbell Soup.

Jon B. Lovelace, chairman, is chief investment officer; Benjamin H. Shattuck, vice president, is client contact.

### Capital Strategy Group Ltd.

600 Erie Place, Suite 206, Syracuse, N.Y. 13204; (315) 471-1547

| | |
|---|---|
| Total assets managed | $30,000,000 |
| Tax-exempt assets managed | $24,000,000 |
| International assets managed | $100,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 124 |
| Types of accounts managed | CJ |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

Capital Strategy Group Ltd. is an equity, fixed-income, balanced and international manager.

Its equity approach is value-oriented, using a mix of growth stock, passive indexing and p/e analysis. Options are used.

Its fixed-income approach uses interest rate anticipation, sector analysis and credit analysis/special situations. Managers buy bonds to gain market value when rates drop. They look for yield pickup in undervalued credit plays.

James B. Sleeper is chief investment officer and client contact.

### Capital Supervisors Inc.

20 N. Clark, Suite 700, Chicago, Ill. 60602; (312) 236-8271

| | |
|---|---|
| Total assets managed | $5,901,000,000 |
| Tax-exempt assets managed | $5,852,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 65 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 8 |
| Size of research staff | 1 |

Capital Management Supervisors, acquired in February by the Prudential Asset Management Group, is an equity, fixed-income and balanced manager.

Its equity approach is based on sector rotation. Managers first identify the major trend of the market, then the sectors that will benefit from economic trends and, finally, attractive securities within the favored sectors.

Its fixed-income approach combines interest rate anticipation and sector analysis. Portfolios are managed actively to achieve total returns in excess of the returns from a buy-and-hold strategy.

The asset mix Jan. 1 was 48% stocks, 38% bonds and 14% cash.

The firm follows 75 stocks closely and 125 to 150 generally; 50% of research is generated internally.

Clients include Chicago Public School Teachers, Kentucky Retirement Systems, Mercy Hospital Employee and Wesleyan College Endowment.

A. Lee Thurow, chairman, is the chief investment officer; James C. Seyfarth, senior vice president, is the client contact.

### Capital Technology Inc.

P.O. Box 2428, Charlotte, N.C. 28211-8240; (704) 541-1437

| | |
|---|---|
| Total assets managed | $83,000,000 |
| Tax-exempt assets managed | $74,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 11 |
| Types of accounts managed | CF |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Capital Technology Inc. is an equity and balanced manager specializing in small-capitalization stocks.

It invests in small, fast-growing companies that are selling at a low p/e relative to their industry and to the overall market.

Clients include USG Corp., South Carolina Electric & Gas and City of Flint, Mich.

Robb Rowe, president, is the chief investment officer; Robert Mathai is the client contact.

### Capitol Bank & Trust Co.

1 Bulfinch Place, Boston, Mass. 02114; (617) 723-5300

| | |
|---|---|
| Total assets managed | $105,000,000 |
| Tax-exempt assets managed: | |
| Total | $102,000,000 |
| Separate | $102,000,000 |
| International assets managed | $22,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 7 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 1 |
| Size of research staff | 2 |

Capitol Bank & Trust Co. is an equity, fixed-income and balanced manager.

Its equity approach is based on market timing and tactical asset allocation decisions primarily using low p/e cyclical stocks.

Its fixed-income approach uses interest rate anticipation and sector analysis, focusing on maturity and sector swaps in anticipation of secular change. Minor portfolio adjustments are made in anticipation of cyclical developments or market inefficiencies.

The parent is Capitol Bancorporation.

G. Peter Grote, vice president and senior trust officer, is the chief investment officer and client contact.

### Capitoline Investment Services Inc.

919 E. Main St., Richmond, Va. 23219; (804) 782-7251

| | |
|---|---|
| Total assets managed | $3,937,000,000 |
| Tax-exempt assets managed | $2,567,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 151 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 14 |
| Size of research staff | 5 |

Capitoline Investment Services Inc. is an equity, fixed-income, balanced, short-term cash and GIC manager.

Its equity approach is opportunistic and changes investment focus based on judgments of relative value. Options are used.

Its fixed-income approach emphasizes intermediate-term obligations; the maximum average maturity is 10 years. Sector and quality yield spread analysis are used to structure portfolios.

The asset mix Jan. 1 was 19% stocks, 17% bonds, 27% cash and 37% GICs.

The firm follows 150 stocks closely and 830 generally; 40% of research is generated internally.

The parent company is Crestar Bank.

Clients include Amtrak, Media General, Overnite Transportation and Sweet Briar College.

Ernest C. Frohboese, senior vice president, is the chief investment officer; William E. Heisler, vice president and director of marketing, is client contact.

### Capstone Asset Management Co.

P.O. Box 3167, Houston, Texas 77253-3167; (713) 750-8003

| | |
|---|---|
| Total assets managed | $830,000,000 |
| Tax-exempt assets managed | $650,000,000 |
| 401(k)/457 assets managed | $75,000,000 |
| 401(k)/457 clients | 3 |
| Real estate assets managed | $80,000,000 |
| Index funds managed | $640,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 5 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Capstone Asset Management Co. is an equity, fixed-income and balanced manager.

Its equity approach is sector rotational, focusing on sector and stock selection based on low relative p/e, low relative price-to-cash flow and yield. Its portfolios are diversified.

It offers passive and active fixed-income approaches. Its active approach is structured, with disciplined management to capitalize on greatest relative value. Its portfolios are diversified and hold high-quality securities.

Options and stock index futures are used.

The asset mix Jan. 1 was 53% stocks, 33% bonds, 5% cash and 9%

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mortgage-backed securities.

The parent company is Capstone Financial Services Inc.

Dan E. Watson, chairman, is chief investment officer; Edward L. Jaroski, president, is client contact.

## Carret and Co. Inc.

122 E. 42nd St., New York, N.Y. 10168; (212) 697-9340

| | |
|---|---|
| Total assets managed | $229,000,000 |
| Tax-exempt assets managed | $96,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 23 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 5 |

Carret and Co. Inc. is an equity manager.

Its value-oriented equity approach emphasizes small-cap OTC stocks selling below book and that have demonstrated industry leadership. Secondary emphasis is on under-researched listed stocks that appear to be in a turnaround posture.

The firm follows 250 stocks closely and 500, generally; 75% of research is generated internally.

Gerard O. Carret is chief investment officer; Frank Betz and Donald Carret are client contacts.

## Cashman, Farrell and Associates

1285 Drummers Lane, Wayne, Pa. 19087; (215) 688-5900

| | |
|---|---|
| Total assets managed | $959,000,000 |
| Tax-exempt assets managed | $949,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 19 |
| Types of accounts managed | CG |
| No. of portfolio managers | 4 |
| Size of research staff | 2 |

Cashman, Farrell and Associates is an equity and balanced manager whose approach is contrarian and stresses low p/e stocks.

The asset mix Jan. 1 was 80% stocks and 20% cash.

The firm follows 120 stocks closely and 400, generally; 85% of research is generated internally.

Clients include Rockwell International, American Airlines and Pennsylvania State Teachers.

Daniel V. Cashman, partner, is chief investment officer; Gerald T. Hofmann, partner, is client contact.

## Cedar Hill Associates Inc.

33 N. LaSalle St., Suite 2600, Chicago, Ill. 60602; (312) 641-3161

| | |
|---|---|
| Total assets managed | $62,000,000 |
| Tax-exempt assets managed | $42,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | CG |
| No. of portfolio managers | 2 |

Cedar Hill Associates Inc. is an equity, fixed-income and balanced manager.

Its equity approach is based on Graham & Dodd principles. Using computer screens, the firm selects issues that appear quantitatively cheap, based upon effective combinations of book value, earnings, dividends and market capitalization within the S&P.

Its fixed-income approach is based on total return, identifying critical turning points in interest rates.

Clients include Illinois Teachers.

Joel H. Jastromb, president, is chief investment officer and client contact.

## Centerre Trust Co.

510 Locust, St. Louis, Mo. 63101; (314) 436-9265

| | |
|---|---|
| Total assets managed | $10,287,000,000 |
| Tax-exempt assets managed: | |
| Total | $4,881,000,000 |
| Commingled | $1,298,000,000 |
| Separate | $3,583,000,000 |
| 401(k)/457 assets managed | $413,000,000 |
| 401(k)/457 clients | 143 |
| Real estate assets managed | $932,000,000 |
| International assets managed | $136,000,000 |
| Indexed assets managed | $290,000,000 |
| Dedicated assets managed | $150,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 250 |
| Separate | 246 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 13 |
| Size of research staff | 13 |

Centerre Trust Co. is an equity, fixed-income, balanced, real estate and international manager.

Its equity buy/sell discipline is driven by a quantitative valuation process based on long-term growth and profitability. Sector selection, sector diversification and concentration methods are employed.

Options are used.

Its fixed-income approach uses constant monitoring of economic conditions to forecast interest rates.

For real estate, Centerre acts as a manager of managers.

The asset mix Jan. 1 was 25% stocks, 39% bonds, 14% cash, 0.2% equity real estate, 18.8% mortgage-backed securities and 3% international equities.

As of Jan. 1, $290 million was in equity indexed funds.

The parent is Centerre Bancorp.

Chief investment officers are James McGuire for equity and balanced accounts, and Robert Franklin for fixed-income accounts; the client contact is Richard W. Hibbs.

**"Beating both the Shearson Lehman Government/Corporate and Salomon Brothers High Grade Bond Indexes for 15 years should be enough to get your attention."**

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## Central Bank of Denver

1515 Arapahoe St., Denver, Colo. 80202; (303) 893-3456

| | |
|---|---|
| Total assets managed | $200,000,000 |
| Tax-exempt assets managed: | |
| Total | $75,000,000 |
| Commingled | $16,000,000 |
| Separate | $59,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients: | |
| Commingled | 150 |
| Separate | 50 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 3 |

Central Bank of Denver is an equity, fixed-income and balanced manager.

The bank offers a value-oriented equity approach, focusing on low p/e stocks. Its fixed-income approach uses interest rate anticipation for treasury issues with a current average maturity of about 24 months.

The parent company is Central Bancorporation.

Daniel A. Rich, vice president, is chief investment officer and client contact.

## Centre Square Investment Group Inc.

1700 Market St., Suite 1919, Philadelphia, Pa. 19103; (215) 786-7070

| | |
|---|---|
| Total assets managed | $972,000,000 |
| Tax-exempt assets managed | $928,000,000 |
| 401(k)/457 assets managed | $144,000,000 |
| 401(k)/457 clients | 21 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 46 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 4 |

Centre Square Investment Group Inc. is an equity, fixed-income and balanced manager.

In equities, the manager selects high-quality companies with accelerating earnings momentum and potential for market appreciation. Managers package industry sectors and trade at the margin in core positions to reduce risk.

Its fixed-income portfolios are structured to resemble but outperform the Shearson Lehman Government/Corporate bond index through shifts in asset allocations, maturities and durations.

The asset mix Jan. 1 was 55% stocks and 45% bonds.

Donald E. Carver, president, is chief investment officer; Brett P. Wilder, senior vice president, is client contact.

## Centurion Capital Management Co. Inc.

43 River Road P.O. Box 570, Nutley, N.J. 07110; (201) 667-4333

| | |
|---|---|
| Total assets managed | $606,000,000 |
| Tax-exempt assets managed | $23,000,000 |
| Real estate assets managed | $500,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 48 |
| Types of accounts managed | CF |
| No. of portfolio managers | 4 |
| Size of research staff | 2 |

Centurion Capital Management Co. Inc. is an equity, fixed-income and balanced manager.

Using macroeconomic analysis, the firm takes a "best relative value approach" to equities, selecting emerging growth and growth stocks. Its fixed-income approach is technical, using moving average analysis. Options, stock index futures and bond index futures are used.

Clients include R.C. Willey & Son and Cargo Master Corp.

John Huebner, senior vice president, is chief investment officer; David J. Olmsted, president, is client contact.

## Chase Investment Counsel

300 Preston Ave., Suite 403, Charlottesville, Va. 22901; (804) 293-9104

| | |
|---|---|
| Total assets managed | $202,000,000 |
| Tax-exempt assets managed | $157,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 14 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 3 |
| Size of research staff | 1 |

Chase Investment Counsel Corp. is an equity, fixed-income and balanced manager.

Its active equity approach stresses undervalued, low p/e and growth stocks with good continuity of earnings and intermediate market capitalization.

Its active fixed-income approach uses interest rate anticipation with a short- to intermediate-term orientation.

The firm uses options.

Clients include Best Products; General Cinema; Masters, Mates & Pilots; and Suburban Propane Gas.

Derwood S. Chase Jr. is chief investment officer and client contact.

## Chase Investors Management Corp.

1211 Avenue of the Americas, New York, N.Y. 10036; (212) 730-2967

| | |
|---|---|
| Total assets managed | $20,400,000,000 |
| Tax-exempt assets managed | $15,900,000,000 |
| 401(k)/457 assets managed | $319,000,000 |
| 401(k)/457 clients | 6 |
| Real estate assets managed | $191,000,000 |
| International assets managed | $1,477,000,000 |
| Index funds managed | $893,000,000 |
| Dedicated funds managed | $1,338,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 77 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 62 |

Chase Investors Management Corp. is an equity, fixed-income, balanced, real estate, international, oil and gas, index fund, GIC and hedging manager.

In equities, it offers passive, growth/emerging growth, sector rotation and low p/e strategies. Opportunities are identified through fundamental Graham & Dodd analysis and anticipation of change.

Its active fixed-income approach uses sector analysis and interest rate forecasts, emphasizing credit quality and marketability; passive management also is offered.

In real estate, institutional-quality properties and flexible investment structures are stressed.

Options, stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 35% stocks, 58% bonds, 3% cash, 0.5% equity real estate, 0.5% mortgage-backed securities and 3% other; $822 million was in foreign stocks, $591 million in foreign bonds, $64 million in foreign cash, $515 million in equity index funds and $378 million in bond index funds.

The parent is Chase Manhattan Corp.

J. Richard Zecher, president, is chief investment officer; Joseph J. Martino, managing director, is client contact.

## Chelsea Management Co.

888 W. Sixth St., Suite 1400, Los Angeles, Calif. 90017; (213) 362-9200

| | |
|---|---|
| Total assets managed | $350,000,000 |
| Tax-exempt assets managed | $348,000,000 |
| International assets managed | $1,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 74 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 5 |
| Size of research staff | 2 |

Chelsea Management Co. is an equity, fixed-income, balanced and cash manager.

Its equity approach is quantitative, emphasizing growth and undervalued stocks, market timing and sector rotation.

Its fixed-income approach uses interest rate anticipation.

Options, stock index futures and fixed-income futures are used.

As of Jan. 1, the firm had $1 million invested in foreign stocks and $250,000 in mortgage-backed securities.

Clients include Motion Picture Industry and International Photographers.

Frederick J. Ruopp is the chief investment officer; Dale K. Longacre, assistant director of marketing, is the client contact.

## Chemical International Asset Management

180 Strand, London, WC2R 1EX, U.K.; 01-379-7474

See entry for THE CHEMICAL INVESTMENT GROUP.

## The Chemical Investment Group

30 Rockefeller Plaza, 59th Floor, New York, N.Y. 10112; (212) 621-2017

| | |
|---|---|
| Total assets managed | $15,000,000,000 |
| Tax-exempt assets managed | $8,400,000,000 |
| No. of portfolio managers | 37 |
| Size of research staff | 17 |

The Chemical Investment Group, through its subsidiaries, is an equity, fixed-income, balanced, international/global and money market manager.

The parent company is Chemical New York Corp.

Kenneth S. Rolland, managing director, is chief investment officer; Edward E. Madden, managing director, is client contact.

These subsidiaries' assets and staff sizes are included in the data above:

- Chemical International Asset Management manages $119 million in tax-exempt assets.

It uses top-down analysis and a market valuation model for asset allocation/timing. Relative price and p/e screens are used for stock selection. In fixed income, top-down analysis is used to determine optimal currency interest rate trend and yield curve positioning. Options and financial futures are used.

Its asset mix Jan. 1 was 71% foreign stocks and 29% foreign cash.

Alan Pendleton is chief investment officer; Anthony F. Healy, director, is client contact.

- Chemical Trust and Banking Co. Ltd.-Japan manages $14 million in tax-exempt assets.

Its equity approach is to identify and weight attractive market sectors and stocks expected to benefit from trends in the Japanese economy.

The asset mix Jan. 1 was 59% foreign stocks, 1.7% foreign bonds and 39.3% cash.

Yasushi Matsumoto is chief investment officer; Yoshio Tokuyama, head of marketing, is client contact.

- Favia, Hill & Associates Inc. manages $5.397 billion in tax-exempt assets.

It offers two equity products: emerging growth and value. The firm first identifies secular change, which pinpoints major investment themes. Fundamental research then is used for security selection.

Its active fixed-income approach uses arbitrage, swaps and other value-added techniques to enhance returns. Sector analysis is used; portfolios are diversified and high quality.

The asset mix Jan. 1 was 36% stocks, 40% bonds and 24% cash; $119 million was in foreign stocks, $100 million in bond index funds and $215 million in dedicated/immunized portfolios.

Kenneth S. Rolland, managing director, is chief investment officer; Kevin Myers, vice president-sales and marketing, is client contact.

- Quantum Investment Management Inc. manages $17 million in tax-exempt assets.

In equities, it provides active, quantitative, systematic and computerized global management. Options and financial futures are used.

The asset mix Jan. 1 was 60% stocks and 40% cash; $10 million was in foreign stocks.

Gerald H. Scriver, president, is chief investment officer; John R. Serhant, executive vice president, is client contact.

- Texas Commerce Investment Management Co. manages $2.277 billion in tax-exempt assets.

In equities, it offers three styles: equity growth, equity income and emerging growth, with equity growth being the primary style.

Its fixed-income approach is risk-averse, with emphasis on maturity management. Sector analysis is used to add value. A highly disciplined six-step process is followed in formulating and implementing the strategy.

The asset mix Jan. 1 was 38% stocks, 34% bonds, 22% cash and 6% mortgage-backed securities.

Geoffrey P. Raymond, president, is chief investment officer; John Cooke, managing director-marketing/client services, is client contact.

- Treasury Asset Management manages $546 million in tax-exempt assets.

Its investment approach is to maximize return by actively trading a high-quality list of fixed-income invest-

ments. It takes a position on the yield curve to take advantage of changes in interest rates and anomalies in the yield curve.

The asset mix Jan. 1 was 100% money market securities.

William B. Budd is chief investment officer; Matthew Cody, vice president, is client contact.

## Chemical Trust and Banking Co. Ltd.-Japan

3-1 Marunouchi 2-Chome, Chiyoda-Ku, Tokyo 100 Japan; 03-214-9590

See entry for THE CHEMICAL INVESTMENT GROUP.

## Chicago Asset Management

11 S. LaSalle St., Suite 2800, Chicago, Ill. 60603; (312) 372-7469

| | |
|---|---|
| Total assets managed | $442,000,000 |
| Tax-exempt assets managed | $442,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 24 |
| Types of accounts managed | CJG |
| No. of portfolio managers | 3 |

Chicago Asset Management Co. is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented, bottom-up and contrarian.

The firm seeks fixed-income securities with good credit quality and intermediate maturities.

The parent company is United Asset Management.

Jon F. Holsteen is the chief investment officer and client contact.

## The Chicago Corp.

208 S. LaSalle, Chicago, Ill. 60604; (312) 855-5985

| | |
|---|---|
| Total assets managed | $847,000,000 |
| Tax-exempt assets managed | $410,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 64 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 6 |
| Size of research staff | 12 |

The Chicago Corp. is an equity, fixed-income and balanced manager.

Its equity approach stresses stocks with consistent growth over an economic cycle that sell at undervalued multiples.

Its fixed-income approach uses interest rate anticipation. Long bonds are bought when interest rates are declining.

The parent company is Chicorp.

Clients include Retirement Research Foundation, Structural Iron Workers, Staley Continental and Chicago Police.

Jon Ender, senior vice president, is the chief investment officer; Charles Klimkowski, vice president, is the client contact.

## Chicago Title & Trust Co.

111 W. Washington, Chicago, Ill. 60602; (312) 630-2765

| | |
|---|---|
| Total assets managed | $2,500,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,500,000,000 |
| Commingled | $400,000,000 |
| Separate | $1,100,000,000 |
| 401(k)/457 assets managed | $150,000,000 |
| 401(k)/457 clients | 160 |
| Real estate assets managed | $100,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients: | |
| Commingled | 290 |
| Separate | 150 |
| Types of accounts managed | CEPGJ |
| No. of portfolio managers | 9 |
| Size of research staff | 5 |

Chicago Title & Trust Co. is an equity, fixed-income, balanced and GIC manager.

Its equity approach is quantitative, emphasizing bottom-up, long-term value stock selection. The firm concentrates on security analysis.

Its fixed-income approach emphasizes management toward a market reference point to enhance returns via security and sector swapping and credit analysis.

The asset mix Jan. 1 was 40% stocks, 40% bonds and 20% cash. As of the same date, it had $100 million in mortgage-backed securities.

The parent company is Alleghany Corp.

Vince Agnew, is chief investment officer and senior vice president; Andrew T. Merz, vice president-institutional marketing, is client contact.

## Churchill Management Corp.

5900 Wilshire Blvd., Suite 600, Los Angeles, Calif. 90036; (213) 937-7110

| | |
|---|---|
| Total assets managed | $190,000,000 |
| Tax-exempt assets managed | $100,000,000 |
| Tax-exempt assets managed | $100,000,000 |
| Real estate assets managed | $10,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 64 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 3 |
| Size of research staff | 4 |

Churchill Management Corp. is a balanced manager.

Its equity approach combines growth and low p/e stocks and market timing.

Its fixed-income approach is primarily passive, with maturity lengths based on intermediate-term forecasts.

As of Jan. 1, the firm had $5 million in equity real estate and $5 million in mortgages.

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**E. Lynn Plaster** *Executive Vice President and Chief Trust Officer*

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Indianapolis, Indiana


Fred A. Fern, president, is the chief investment officer; Steven P. Mann, vice president, is the client contact.

## CIGNA Asset Advisers Inc.

Hartford, Conn. 06152; (203) 726-6000

| | |
|---|---|
| Total assets managed | $24,102,000,000 |
| Tax-exempt assets managed: | |
| Total | $21,705,000,000 |
| Pooled accounts | $3,800,000,000 |
| Separate accounts | $2,496,000,000 |
| GICs | $1,386,000,000 |
| Annuities | $769,000,000 |
| Other | $13,254,000,000 |
| 401(k)/457 assets managed | $2,300,000,000 |
| Real estate assets managed | $1,471,000,000 |
| International assets managed | $126,000,000 |
| Indexed assets managed | $22,000,000 |
| Dedicated assets managed | $2,155,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 672 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 13 |
| Size of research staff | 18 |

CIGNA Asset Advisers Inc. is an equity, fixed-income, real estate, international and GIC manager.

Its research-based equity approach uses fundamental analysis to identify stocks with superior return potential. Analysis focuses on determination and valuation of a company's underlying growth in earnings.

Its fixed-income approach is cyclical anticipation of major interest rate movements over full economic cycles.

Options and stock index futures are used.

In real estate, emphasis is on diversified and specialized investments, managed by disciplined strategies. Value is added through aggressive, incentive-based asset management.

The separate account asset mix Jan. 1 was 31% stocks, 32% bonds, 14% cash and 23% equity real estate; $126 million was in foreign stocks and $22 million in equity index funds.

The parent is CIGNA Corp.

George R. Trumbull, is chief operating officer; Richard R. Anderson, senior vice president, is client contact.

## CIMG Inc.

P.O. Box 17500, Milwaukee, Wis. 53217; (414) 241-4575

| | |
|---|---|
| Total assets managed | $131,000,000 |
| Tax-exempt assets managed | $79,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 116 |
| Types of accounts managed | C |
| No. of portfolio managers | 3 |

CIMG Inc. is a balanced manager.

Its equity approach uses sector rotation and market timing/tactical asset allocation. Equities are concentrated in market sectors benefiting from the current business cycle.

Its fixed-income approach uses interest rate anticipation in government securities. Average maturities range from two to 25 years.

Louis T. Chambers, president, is chief investment officer and client contact.

## Citicorp Investment Management

Citicorp Center, 153 E. 53rd St., New York, N.Y. 10043; (212) 559-9700

| | |
|---|---|
| Total assets managed | $34,675,000,000 |
| Tax-exempt assets managed | $17,246,000,000 |
| 401(k)/457 assets managed | $1,300,000,000 |
| 401(k)/457 clients | 106 |
| Real estate assets managed | $445,000,000 |
| International assets managed | $347,000,000 |
| Index funds managed | $335,000,000 |
| Dedicated funds managed | $316,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 369 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 75 |
| Size of research staff | 26 |

Citicorp Investment Management Inc. is an equity, fixed-income, balanced, real estate, international, GIC, venture capital, index, immunization, special equity and fixed-income, futures and cash manager. It also offers tactical asset allocation.

Its equity approach is growth-oriented based on positive earnings revisions. Equal emphasis is placed on fundamental research, quantitative disciplines and valuation models in determining weightings.

In fixed income, it shifts portfolio sector, quality, coupon, issuer, duration and currency profiles in response to early identification of changes in the social, political and economic climate.

Options, stock index futures and fixed-income futures are used.

Its real estate approach emphasizes prime, income-producing properties in major cities with investments structured as direct-equity ownerships and convertible participating mortgages.

The asset mix Jan. 1 was 37% stocks, 18% bonds, 41% cash and 4% real estate. As of the same date, the firm had $306 million in equity real estate, $85 million in mortgages, $54 million in mortgage-backed securities, $298 million in foreign stocks, $25 million in foreign bonds, $24 million in foreign cash and $335 million in equity indexed funds.

The parent company is Citicorp.

Robert G. Wade Jr. is chief investment officer; Joan McIlroy, vice president, is client contact.

## Citizens Fidelity Bank & Trust Co.

P.O. Box 33000, Louisville, Ky. 40232; (502) 591-2946

| | |
|---|---|
| Total assets managed | $2,200,000,000 |
| Tax-exempt assets managed: | |
| Total | $735,000,000 |
| Commingled | $100,000,000 |
| Separate | $635,000,000 |
| 401(k)/457 assets managed | $23,000,000 |
| 401(k)/457 clients | 10 |
| Real estate assets managed | $40,000,000 |
| International assets managed | $1,000,000 |
| Indexed assets managed | $25,000,000 |
| Dedicated assets managed | $4,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients: | |
| Commingled | 232 |
| Separate | 476 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 6 |
| Size of research staff | 3 |

Citizens Fidelity Bank & Trust Co. is an equity, fixed-income, balanced and international/global manager.

Its equity approach considers value not only a function of low p/e, but also earnings growth; asset allocation is used but not market timing.

In fixed income, interest rate anticipation and sector analysis are used; maturities don't exceed 10 years.

The asset mix Jan. 1 was 40% stocks, 45% bonds, 10% cash and 5% mortgage-backed securities.

The parent is PNC Financial Corp.

Ronald J. Murphy, senior vice president, is chief investment officer; David R. Sawtelle, vice president, is client contact.

## Clean Yield Asset Management Inc.

Kittery Business Center, Box 219A, Kittery, Maine 03904; (207) 439-3922

| | |
|---|---|
| Total assets managed | $2,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $50,000 |
| No. of portfolio managers | 3 |

Clean Yield Asset Management Inc., an equity manager, is value oriented, focusing on emerging growth and growth stock. The firm bases investment decisions on fundamentals and employs technical analysis to assist in purchase and sale decisions.

It follows 100 stocks closely and 300, generally; 70% of research is generated internally.

The parent company is Clean Yield Group Inc.

Benjamin Lovell, president, is chief investment officer and client contact.

## Clutinger, Williams & Verhoye Inc.

1200 Third Ave. Suite 920, San Diego, Calif. 92101; (619) 231-2701

| | |
|---|---|
| Total assets managed | $102,000,000 |
| Tax-exempt assets managed | $69,000,000 |
| Tax-exempt clients | 65 |
| Types of accounts managed | CF |
| No. of portfolio managers | 3 |

Clutinger, Williams & Verhoye Inc. is an equity, fixed-income and balanced manager.

Its equity approach is value oriented, using Graham and Dodd analysis with a tendency for growth and low p/e stocks; sector rotation and tactical asset allocation are used. Its fixed-income approach focuses on interest rate anticipation and sector analysis.

The firm follows 40 to 50 stocks closely and fewer than 100, generally; 80 to 100% of the research is generated internally.

Thomas C. Clutinger, Louis E. Williams Jr. and Karl E. Verhoye, principals, are chief investment officers and client contacts.

## CMB Investment Counselors

1880 Century Park E. Suite 600, Los Angeles, Calif. 90067; (213) 557-1500

| | |
|---|---|
| Total assets managed | $2,700,000,000 |
| Tax-exempt assets managed | $1,800,000,000 |
| Real estate assets managed | $225,000,000 |
| International assets managed | $11,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 17 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 6 |
| Size of research staff | 10 |

CMB Investment Counselors is an equity, fixed-income and balanced manager. The firm manages mortgage pass-throughs as a separate account.

Its equity approach is growth stock and value based. The firm seeks good relative value among stocks with strong sales and earning momentum across five analytical categories: major growth; developing growth; credit cyclical; cyclical value; and asset value.

It takes a value-oriented fixed-income approach focusing on sector analysis. It seeks broad areas of undervaluation among government, corporate and mortgage pass-through securities.

The asset mix Jan. 1 was 11.8% stocks, 68.1% bonds, 8.1% cash and 12% mortgage-backed securities; $3.6 million was in mortgages and $11 million in foreign bonds.

The parent is First Bank System Inc.

Clients include Los Angeles County Employees, Amoco and Sheet Metal Workers.

Thomas J. Steffanci, senior managing director, is chief investment officer; Gordon C. Coomans, managing director, is client contact.

## CM&M Asset Management

1613 Spruce St., Philadelphia, Pa. 19103; (215) 546-8212

| | |
|---|---|
| Total assets managed | $105,000,000 |
| Tax-exempt assets managed | $85,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 6 |
| Types of accounts managed | CF |
| No. of portfolio managers | 2 |
| Size of research staff | 4 |

CM&M Asset Management Co., a fixed-income manager, uses value-oriented analysis, interest rate anticipation and market timing. Fixed-income futures also are used.

The parent company is CM&M Group Inc.

Clients include AMAX, Fuqua Industries and Howmet.

Lacy H. Hunt, president, and Anthony J. Basile, executive vice president, are the chief investment officers. Mr. Basile is the client contact.

## Cohen & Steers Capital Management Inc.

757 Third Ave., New York, N.Y. 10017; (212) 832-3232

| | |
|---|---|
| Total assets managed | $225,000,000 |
| Tax-exempt assets managed | $85,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 3 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 3 |

Cohen & Steers Capital Management Inc. is a real estate equity securities manager, buying real estate securities for a premium yield and assets at a discount.

Martin Cohen is the chief investment officer and client contact.

## Coldwell Banker Capital Management Services

533 Fremont Ave., Los Angeles, Calif. 90071; (213) 613-3491

| | |
|---|---|
| Total assets managed | $817,000,000 |
| Tax-exempt assets managed | $817,000,000 |
| Real estate assets managed | $779,000,000 |
| Minimum separate account | $15,000,000 |
| Tax-exempt clients | 41 |
| Types of accounts managed | CEFG |

Coldwell Banker Capital Management Services, a real estate manager, maximizes asset values through aggressive management and timely dis-

position. Target properties are $5 million to $25 million office, industrial and retail sites.

The asset mix Jan. 1 was 90% equity real estate, 5.3% mortgages and 4.7% cash. As of the same date, the firm had $736 million in equity real estate and $43 million in mortgages.

The parent company is Sears, Roebuck & Co.

Clients include AT&T, Honeywell and Hughes Aircraft.

Tad W. Jones, president, is chief investment officer; Robert W. Morris, first vice president, is client contact.

## Collins Associates

840 Newport Center Drive, Suite 660, Newport Beach, Calif. 92660; (714) 644-5771

Collins Associates, a manager of managers, has $33 billion in total assets under management on its behalf by external managers.

It controls about $9 billion in 13 advisory accounts and $150 million in seven discretionary accounts for corporate, educational endowment and foundation clients.

The accounts cover equity, fixed-income, balanced, international, real estate and GIC management. Options, stock index futures and fixed-income futures are used.

All the assets are covered by portfolio insurance.

There are three internal portfolio managers and a four-member research staff. The firm follows 250 investment managers closely and 400 investment managers generally. All research on managers is conducted internally.

The parent company is Budge Collins Inc.

Clients include Xerox, Atlantic Richfield, Sunkist Growers and the University of Texas.

Budge Collins, president, is chief investment officer and client contact.

## Colorado Capital Advisors

P.O. Box 5168, Denver, Colo. 80217; (303) 892-4203

| | |
|---|---|
| Total assets managed | $900,000,000 |
| Tax-exempt assets managed: | |
| Total | $380,000,000 |
| Commingled | $80,000,000 |
| Separate | $300,000,000 |
| Dedicated assets managed | $10,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients: | |
| Commingled | 200 |
| Separate | 20 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 9 |

Colorado Capital Advisors, formerly Colorado National Asset Management, is an equity, fixed-income and balanced manager.

Its equity approach is yield- and value-oriented using Graham & Dodd analysis.

Its fixed-income approach is based on sector analysis. It does a historical spread analysis to swap from rich to cheap sectors.

Clients include Shriners Hospital.

The parent company is Colorado National Bank of Denver.

Robert J. Alder, president, is chief investment officer; Coleman R. Robinson, vice president, is client contact.

## Columbia Management Co.

1300 S.W. Sixth Ave. P.O. Box 1350, Portland, Ore. 97207; (503) 222-3600

| | |
|---|---|
| Total assets managed | $5,170,000,000 |
| Tax-exempt assets managed | $3,882,000,000 |
| 401(k)/457 assets managed | $121,000,000 |
| Real estate assets managed | $355,000,000 |
| Dedicated funds managed | $130,000,000 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients | 67 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 11 |

Columbia Management Co. is an equity, fixed-income, balanced and GIC manager.

Its top-down equity approach is value-oriented and uses sector rotation.

Its fixed-income approach uses sector analysis. Its objectives are to maximize return while avoiding credit risk and price volatility. Portfolio structures emphasize yield advantage vs. major indexes and active management.

Columbia Trust Co., a wholly owned subsidiary, manages $500 million for smaller-fund clients.

Columbia Management's asset mix Jan. 1 was 55% stocks, 22% bonds, 14% cash and 9% mortgage-backed securities.

It follows 300 stocks closely and 300, generally; 25% of research is generated internally.

Clients include Oregon, Bechtel Power and R.K. Mellon Foundation.

James F. Rippey, president, is chief investment officer; Chad L. Fleischman is client contact.

## Columbus Bank & Trust Co.

P.O. Box 120, Columbus, Ga. 31902; (404) 649-2433

| | |
|---|---|
| Total assets managed | $435,000,000 |
| Tax-exempt assets managed: | |
| Total | $138,000,000 |
| Commingled | $46,000,000 |
| Separate | $92,000,000 |
| Real estate assets managed | $20,000,000 |
| International assets managed | $2,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 196 |
| Separate | 15 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 3 |
| Size of research staff | 1 |

Columbus Bank & Trust Co. is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented and stresses equities with strong earnings potential, high free cash flow and low relative p/es. Options are used.

Its fixed-income approach is implemented within a conservative framework using maturities up to 10 years and using interest rate anticipation, sector analysis and yield curve analysis.

The parent is CB&T Bancshares.

Danny R. Hobbs, vice president, is chief investment officer; Joseph M. Lowery, investment officer; is client contact.

## Columbus Circle Investors

75 Rockefeller Plaza, New York, N.Y. 10019; (212) 397-8760

| | |
|---|---|
| Total assets managed | $2,784,000,000 |
| Tax-exempt assets managed | $1,114,000,000 |
| Real estate assets managed | $28,000,000 |
| International assets managed | $500,000 |
| Dedicated funds managed | $130,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 55 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 4 |
| Size of research staff | 7 |

Columbus Circle Investors is an equity, fixed-income and balanced manager.

Its equity approach uses growth stock and sector rotation. It seeks companies whose essential story elements are exceeding expectations and demonstrating positive momentum and surprise.

Its fixed-income approach uses interest rate anticipation and sector analysis, focusing on factors affecting maturity and quality.

Options, stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 54% stocks, 24% bonds, 19.5% cash and 2.5% mortgage-backed securities.

The firm follows between 25 and 35 stocks closely and 850, generally; 30% of the research is generated internally.

The parent company is Thomson McKinnon Asset Management L.P.

Clients include Wickes, Gulf & Western, Armco and 3M.

The chief investment officer is Irwin F. Smith, chairman; the client contacts are Winthrop Headley, vice president, in New York, and Bob Fehemann, vice president, in Chicago.

**Key to abbreviations**

**C**: Corporate account
**E**: Educational endowments
**F**: Private foundations
**G**: U.S. state and local gov'ts
**J**: Jointly trusteed
**P**: Canadian provincial gov'ts
**U**: Unions (Canadian firms only)


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## Comerica Bank-Detroit

211 W. Fort St., Detroit, Mich. 48275-1034; (313) 222-5056

| | |
|---|---|
| Total assets managed | $5,527,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,990,000,000 |
| Commingled | $610,000,000 |
| Separate | $1,380,000,000 |
| 401(k)/457 assets managed | $170,000,000 |
| 401(k)/457 clients | 150 |
| International assets managed | $42,000,000 |
| Indexed assets managed | $20,000,000 |
| Dedicated assets managed | $47,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 900 |
| Separate | 200 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 6 |
| Size of research staff | 3 |

Comerica Bank-Detroit is an equity, fixed-income, balanced and international manager.

Its equity approach is to buy common stocks with above-average earnings growth and profitability.

It uses passive and sector analysis approaches in fixed-income investments, buying high-quality, intermediate-term securities.

Options are used.

The asset mix Jan. 1 was 30% stocks, 55% bonds and 15% cash; $42 million was in foreign stocks and $20 million in equity index funds.

Clients include City of Detroit, Blue Cross/Blue Shield and Detroit Edison.

The parent is Comerica Inc.

Manown Kisor Jr., executive vice president, is the chief investment officer; Robert J. Kay, assistant vice president, is the client contact.

## Commerce Bank

P.O. Box 419248, Kansas City, Mo. 64141-6248; (816) 234-2000

| | |
|---|---|
| Total assets managed | $3,309,000,000 |
| Tax-exempt assets managed: | |
| Total | $806,000,000 |
| Commingled | $122,000,000 |
| Separate | $684,000,000 |
| 401(k)/457 assets managed | $6,000,000 |
| 401(k)/457 clients | 42 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 79 |
| Separate | 559 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 13 |

Commerce Bank is an equity, fixed-income, balanced and GIC manager.

Stock selection is based on a systematic value/momentum approach. Portfolios are rotated through economic sectors and market characteristics.

In fixed income, the firm has a core component based on interest rate anticipation and a momentum component that takes advantage of short-term swings in rates. Options and fixed-income futures are used.

The asset mix Jan. 1 was 50% stocks and 50% bonds.

The parent is Commerce Bancshares.

George H. Wood is chief investment officer; Brian Fitzpatrick is client contact.

## Commerce Bank of St. Louis

8000 Forsyth, St. Louis, Mo. 63105; (314) 854-7328

| | |
|---|---|
| Total assets managed | $780,000,000 |
| Tax-exempt assets managed: | |
| Total | $218,000,000 |
| Commingled | $37,000,000 |
| Separate | $181,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients: | |
| Commingled | 83 |
| Separate | 125 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 6 |

Commerce Bank of St. Louis is an equity, fixed-income and balanced manager.

In equity investments, the bank takes a top-down approach. Within selected sectors, low p/e stocks are purchased. Its fixed-income approach is active, using interest rate anticipation and market timing accordingly. Maturities do not exceed 15 years.

The parent company is Commerce Bancshares.

Ron Gerdel, senior vice president, is chief investment officer; Brian D. Fitzpatrick, senior vice president, is client contact.

## Commerce Capital Management

1 Commerce Square, Memphis, Tenn. 38117; (901) 523-3056

| | |
|---|---|
| Total assets managed | $485,000,000 |
| Tax-exempt assets managed: | |
| Total | $175,000,000 |
| Commingled | $45,000,000 |
| Separate | $130,000,000 |
| International assets managed | $20,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients: | |
| Commingled | 175 |
| Separate | 110 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 4 |
| Size of research staff | 2 |

Commerce Capital Management is an equity, fixed-income and balanced manager.

Its equity approach is based on Graham & Dodd analysis; its fixed-income approach is passive.

The parent is National Bank of Commerce.

Myron Mall is chief investment officer; James Beasley Wellford is client contact.

## Commerce Investment Management Inc.

Suite 850 NBC Center, Lincoln, Neb. 68508; (402) 474-4383

| | |
|---|---|
| Total assets managed | $103,000,000 |
| Tax-exempt assets managed | $28,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 21 |
| Types of accounts managed | CFG |
| No. of portfolio managers | 3 |

Commerce Investment Management Inc. is an equity, fixed-income and balanced manager.

Its top-down equity approach emphasizes growth stocks and sector rotation. Its fixed-income approach also is top down, using interest rate anticipation and sector analysis.

The parent company is Commerce Financial Group Inc.

Clients include Nebraska Investment Council.

Robert M. Jergovic is chief investment officer; Gaylan C. Abood is client contact.

## Commerz International Capital Management GmbH

Kettenhofweg 22, 6000 Frankfurt, West Germany 069; 71-91-22-0

| | |
|---|---|
| Total assets managed | $972,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $10,000,000 |
| No. of portfolio managers | 5 |

Commerz International Capital Management GmbH is an equity, fixed-income, balanced, international and GIC manager.

Its top-down equity approach emphasizes active management; indexed management is offered by a special group within the firm.

Its fixed-income approach is based on interest rate anticipation, using a top-down approach for international asset allocation and a quantitative approach for maturity selection.

The parent is Commerzbank.

Heinz J. Hockmann is chief investment officer; Norbert Enste, head of customer relations, is client contact.

## The Common Fund

P.O. Box 940, 363 Reef Road, Fairfield, Conn. 06430; (203) 254-1211

The Common Fund is a manager of managers; $6.7 billion is managed on its behalf by external investment managers.

Equity, fixed-income, balanced and international management is offered through the external managers.

Its equity approach employs commingled programs that use multiple investment techniques, including emerging growth, growth and low p/e stocks, Graham & Dodd and quantitative analysis, market timing and country selection.

Fixed-income approaches offered include interest rate anticipation, sector analysis and country selection.

George J. Keane, president, is chief investment officer; David Storrs is client contact.

## Composite Research & Management Co.

1000 Second Ave. Suite 2800, Seattle, Wash. 98104; (206) 464-8100

| | |
|---|---|
| Total assets managed | $971,000,000 |
| Tax-exempt assets managed | $155,000,000 |
| Real estate assets managed | $15,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 28 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 6 |

Composite Research & Management Co. is an equity, fixed-income and balanced manager.

Its equity approach focuses on intrinsic value, generally confined to low p/e stocks. The bottom-up fundamental research process looks for companies with net free cash flow, low debt leverage and above-average return on capital.

Its fixed-income approach emphasizes sector analysis and credit quality. Intermediate maturities, particularly electric utility and finance issues, are actively managed.

Clients include Seattle Art Museum and Pay N Pak Stores.

Craig Hobbs, executive vice president, is client contact.

## Computime Institutional Services Inc.

26 W. Ninth St., New York, N.Y. 10011; (212) 777-9494

| | |
|---|---|
| Total assets managed | $17,000,000 |
| Tax-exempt assets managed | $3,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |
| Size of research staff | 5 |

Computime Institutional Services Inc., an equity manager, uses sector rotation and market timing. Options and stock index futures are used.

It follows all listed stocks; all research is generated internally.

David M. Levin is the chief investment officer and client contact.

## Concord Capital Management

2800 Campus Drive, San Mateo, Calif. 94403; (415) 572-0400

| | |
|---|---|
| Total assets managed | $1,965,000,000 |
| Tax-exempt assets managed | $1,965,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 29 |
| Types of accounts managed | CEFJG |
| Size of research staff | 6 |

Concord Capital Management is an equity manager.

Its equity approach is opportunistic, developing themes and identifying groups of stocks managers believe are undervalued.

The asset mix Jan. 1 was 99% stocks and 1% cash.

Clients include Ford Motor, State of Virginia, RJR Nabisco and Ameritech.

Harold L. Arbit, president, is chief investment officer; Edward D. Matz Jr., senior vice president, is client contact.

## Confederation Life Insurance Co.

P.O. Box 105103, Atlanta, Ga. 30348; (404) 953-5100

| | |
|---|---|
| Total assets managed | $791,000,000 |
| Tax-exempt assets managed: | |
| Total | $791,000,000 |
| Pooled accounts | $38,000,000 |
| Separate accounts | $5,000,000 |
| GICs | $743,000,000 |
| Annuities | $5,000,000 |
| International assets managed | $2,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 234 |
| Types of accounts managed | CG |
| No. of portfolio managers | 16 |
| Size of research staff | 18 |

Confederation Life Insurance Co. is an equity, fixed-income, balanced, international, GIC and annuity manager.

Its equity approach is based on Graham & Dodd analysis. Options are used. Its fixed-income approach bases the portfolio's duration on interest rate forecasts and/or current economic statistics and trends. Shifts are gradual.

The separate account asset mix Jan. 1 was 59% stocks, 27% bonds and 14% cash; $2 million was in foreign stocks.

John H. Watson, senior vice president-investments, is chief investment officer; Gordon F. Grigor, group pension vice president, is client contact.

## Connecticut Mutual Life Insurance Co.

140 Garden St., Hartford, Conn. 06154; (203) 727-6500

| | |
|---|---|
| Total assets managed | $10,025,000,000 |
| Tax-exempt assets managed: | |
| Total | $2,735,000,000 |
| GICs | $2,322,000,000 |
| Other | $413,000,000 |
| Minimum separate account | $5,000,000 |
| Types of accounts managed | CJ |

Connecticut Mutual Life Insurance Co. offers separate accounts invested in domestic and international equities and fixed-income securities, as well as GICs.

The insurer has responsibility for pooled separate accounts, managed by external investment advisers, totaling an additional $203 million.

It establishes exclusive relationships with independent investment managers who act as investment advisers for these accounts. These managers are Westwood Management Corp., Solomon Asset Management Inc., Brown Brothers Harriman and State House Capital.

Two equity approaches are offered: active asset allocation and low p/e combined with achieved earnings in excess of expectations.

The hybrid fixed-income style invests in high yields and convertibles.

Connecticut Mutual also offers discretionary and non-discretionary asset allocation services through its CM Asset Advisors subsidiary.

Gary E. Lineberry, vice president-group pension sales and marketing, is client contact.

## Connecticut National Bank

777 Main St., Hartford, Conn. 06115; (203) 728-4420

| | |
|---|---|
| Total assets managed | $5,469,000,000 |
| Tax-exempt assets managed: | |
| Total | $2,354,000,000 |
| Commingled | $383,000,000 |
| Separate | $1,971,000,000 |
| Indexed assets managed | $8,000,000 |
| Dedicated assets managed | $7,000,000 |
| Minimum separate account | $1,000,000 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 27 |
| Size of research staff | 10 |

Connecticut National Bank is an equity, special equity, fixed-income and balanced manager.

Its equity approach seeks value relative to fundamental assessments. Its fixed-income approach is based on maturity shifts.

The asset mix Jan. 1 was 47% stocks, 44% bonds and 9% cash. As of the same date, $8 million was in equity index funds.

The parent is Hartford National Corp.

Rudolf Abel Jr., senior vice president, is chief investment officer; Arnold P. Boecklin, vice president, is client contact.

## Connors Investor Services

1100 Berkshire Blvd., Wyomissing, Pa. 19610; (215) 376-7418

| | |
|---|---|
| Total assets managed | $87,000,000 |
| Tax-exempt assets managed | $54,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 53 |
| Types of accounts managed | CFJ |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Connors Investor Services Inc. is an equity and balanced manager.

In equities, it selects stocks for option writing that have below-average downside risk and high current return. It also buys stock in small companies at below-market multiples with above-average earnings growth potential.

Fixed income securities, primarily high-quality issues with short to medium staggered maturities, are used in many accounts.

James M. Connors, president, is chief investment officer; Ronald H. Seher, vice president, is client contact.

## Consistent Asset Management Co.

1330 King St., Wilmington, Del. 19801; (302) 651-9400

| | |
|---|---|
| Total assets managed | $190,000,000 |
| Tax-exempt assets managed | $175,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 12 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 2 |

Consistent Asset Management Co., a quantitative fixed-income manager, uses mathematical analysis to allocate portfolios between U.S. Treasury issues and cash. It is trend recognition oriented, but does not use forecasting. Options and fixed-income futures are used.

Clients include Bank of Delaware and Virginia Power.

Daryl L. Hudson, chairman, is the chief investment officer; David W. Umbs, president, is the client contact.

## Constitution Capital Management Co.

Exchange Place 53 State St., Boston, Mass. 02109; (617) 722-4800

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**William G. Gossard** *Vice President and Investment Officer*

Let us show you why we're the experts in fixed income management. Call Phillip E. Chambers, Vice President and Investment Officer, at (317) 639-8151. Ask for a copy of our newsletter, *Economic Outlook.*

BANK ONE™
Asset Management Division

BANK ONE, INDIANAPOLIS, NA
Indianapolis, Indiana

| | |
|---|---|
| Total assets managed | $2,948,000,000 |
| Tax-exempt assets managed: | |
| Total | $2,393,000,000 |
| Commingled | $1,193,000,000 |
| Separate | $1,200,000,000 |
| 401(k)/457 assets managed | $142,000,000 |
| 401(k)/457 clients | 4 |
| Dedicated assets managed | $15,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients: | |
| Separate | 218 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 16 |
| Size of research staff | 4 |

Constitution Capital Management Co. is an equity, fixed-income and balanced manager.

The firm offers two equity approaches. In the low p/e Valuepath approach, equities first are computer-ranked by fundamentals and then screened by professionals to avoid excessive risk. Buy/sell decisions are highly disciplined. The Diversified Growth approach concentrates on companies that offer superior growth-potential at attractive valuation levels.

In fixed income, value is added through active management of sector switches and individual issue selection. Portfolios are structured with a duration close to the Shearson Lehman Government/Corporate index.

The asset mix Jan. 1 was 50% stocks, 35% bonds and 15% cash.

Clients include Foxboro, Philips Andover Academy and Reed & Barton.

The parent is Bank of New England Corp.

John G. Anderson is chief investment officer; Harry Sterling Jr., senior vice president, is client contact.

## Continental Assurance Co.

CNA Plaza, Chicago, Ill. 60685; (312) 822-5000

| | |
|---|---|
| Total assets managed | $6,473,000,000 |
| Tax-exempt assets managed: | |
| Total | $3,721,000,000 |
| GICs | $2,213,000,000 |
| Annuities | $262,000,000 |
| Other | $1,246,000,000 |
| Types of accounts managed | CEGJ |
| No. of portfolio managers | 4 |
| Size of research staff | 6 |

Continental Assurance Co. is an equity and fixed-income manager.

Its equity approach is long-term growth emphasizing security of principal. Its fixed-income approach is passive and uses interest rate anticipation and sector analysis, buying and holding bonds while immunizing a portion of the portfolio.

The separate account asset mix Jan. 1 was 6.8% stocks, 93.1% bonds and 0.1% cash.

Its clients include IBM, Delta Air Lines, Conoco and Chevron.

The parent is CNA Insurance.

Donald Rycroft, treasurer, is chief investment officer; Ralph Vuono, national sales director, is client contact in New York at (212) 306-8637.

## Continental Capital Management Corp.

30 N. LaSalle St., Chicago, Ill. 60697; (312) 828-8298

| | |
|---|---|
| Total assets managed | $1,539,000,000 |
| Tax-exempt assets managed | $1,539,000,000 |
| Real estate assets managed | $5,000,000 |
| Dedicated funds managed | $40,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 55 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 4 |

Continental Capital Management Corp. is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented with a yield hurdle. Low p/e is emphasized.

Its fixed-income approach is passive. Interest rate risk exposure is managed by relating the portfolio's duration to the duration of the market.

The asset mix Jan. 1 was 38% stocks, 52% bonds and 10% cash; $5 million was in mortgage-backed securities.

It follows 100 stocks closely and 300, generally.

The parent is Continental Illinois Corp.

Clients include Shelby Williams, Coe College, Pipefitters and Cook County.

Raymond O. Wicklander Jr. is client contact.

## Contravisory Investment Management Corp.

37 Derby St., Hingham, Mass. 02043; (617) 740-1786

| | |
|---|---|
| Total assets managed | $14,000,000 |
| Tax-exempt assets managed | $6,000,000 |
| Minimum separate account | $300,000 |
| Tax-exempt clients | 15 |
| Types of accounts managed | CF |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Contravisory Investment Management Corp. is an equity and balanced manager.

Its equity approach relies upon a quantitative discipline that identifies changes in the long-term relative price trends of stocks, industry groups and sectors of the market. Options are used.

Its fixed-income approach uses interest rate anticipation.

G. Edward Noonan is the chief investment officer; Peter H. Reinemann is the client contact.

## David W. Cook & Co. Inc.

P.O. Box 868, West Newbury, Mass. 01985; (617) 363-5381

| | |
|---|---|
| Total assets managed | $33,000,000 |
| Tax-exempt assets managed | $8,000,000 |
| Tax-exempt clients | 18 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |

David W. Cook & Co., an equity, fixed-income and balanced manager, pursues a total rate of return approach for all investments.

The firm follows 30 stocks closely and 100, generally; 80% of research is generated internally.

David W. Cook, president, is chief investment officer and client contact.

## Cooke & Bieler Inc.

1435 Walnut St., Philadelphia, Pa. 19102; (215) 567-1101

| | |
|---|---|
| Total assets managed | $2,289,000,000 |
| Tax-exempt assets managed | $1,882,000,000 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 70 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 8 |

Cooke & Bieler Inc. is an equity, fixed-income and balanced manager.

Its equity approach stresses low-risk growth. Portfolios are structured with higher-than-market yields and return on equity, lower-than-market betas and strong balance sheets.

Its fixed-income approach uses interest rate anticipation, with emphasis on credit analysis and a structured maturity schedule.

The asset mix Jan. 1 was 75% stocks, 13% bonds and 12% cash.

The firm follows 70 stocks closely and 250, generally; 80% of research is generated internally.

The parent is United Asset Management.

Clients include Hercules, Columbia Gas, Southern Ohio Ironworkers and Wisconsin Electric.

Russell G. Redenbaugh is chief investment officer; Robert T. Brooks is client contact.

## Copley Real Estate Advisors

399 Boylston St., Boston, Mass. 02116; (617) 578-1200

| | |
|---|---|
| Total assets managed | $11,000,000,000 |
| Tax-exempt assets managed | $8,700,000,000 |
| Real estate assets managed | $8,700,000,000 |
| Minimum separate account | $100,000,000 |
| Tax-exempt clients | 215 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 6 |

Copley Real Estate Advisors, a real estate manager, takes a developmental approach. The investments are structured as partnerships with local real estate developers in selected markets. The firm also makes opportunistic investments, using a contrarian philosophy.

All assets were in equity real estate Jan. 1.

The parent is The New England.

Clients include AT&T, Washington, Blue Cross/Blue Shield and Ohio Teachers.

Joseph W. O'Connor is the chief investment officer; John C. Phillips Jr. is the client contact.

## Corbyn Associates Inc.

Suite 330, The Quadrangle, Village of Cross Keys, Baltimore, Md. 21210; (301) 532-8600

| | |
|---|---|
| Total assets managed | $136,000,000 |
| Tax-exempt assets managed | $89,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 110 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

Corbyn Associates Inc. is a balanced manager.

Its equity approach is value-oriented with a foundation of modified contrary opinion. The low p/e emphasis is on the inefficient sector and special situations. Technical analysis plays a supplemental role. The fixed-income philosophy is conservative, stressing interest rate anticipation. There is heavy use of short-term U.S. government securities, interspersed with convertibles and an occasional AAA corporate bond for yield enhancement.

Daniel R. Long III, president, is chief investment officer; Richard Hynson Jr., vice president, is client contact.

## CoreStates Investment Advisers

Broad & Chestnut Streets, Philadelphia, Pa. 19101-7618; (215) 629-2821

| | |
|---|---|
| Total assets managed | $4,159,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,430,000,000 |
| Commingled | $573,000,000 |
| Separate | $857,000,000 |
| 401(k)/457 assets managed | $137,000,000 |
| 401(k)/457 clients | 29 |
| Real estate assets managed | $60,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients: | |
| Commingled | 100 |
| Separate | 30 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 8 |
| Size of research staff | 8 |

CoreStates Investment Advisers is an equity, fixed-income and balanced manager.

Its active equity approach focuses on earnings momentum and valuation to achieve long-term capital appreciation. The fixed-income approach combines active management of portfolio duration and sector emphasis to dampen volatility and maximize return. Interest rate anticipation is used.

The asset mix Jan. 1 was 50% stocks, 36% bonds, 10% cash and 4% mortgage-backed securities.

It follows 200 stocks closely and 500 generally; 50% of research is generated internally.

The parent company is Philadelphia National Bank.

Clients include United Presbyterian Church and Campbell Soup.

Paul G. Finegan, chairman, is chief investment officer; Mark G. Burlingham, vice president, is client contact.

## Corporate Investment Associates Inc.

P.O. Box 7500 Station A, Toronto, Ontario M5W 1P9; (416) 864-6144

| | |
|---|---|
| Total assets managed | $4,441,000,000 |
| Tax-exempt assets managed | $4,288,000,000 |
| Real estate assets managed | $295,000,000 |
| Non-North American assets | $42,000,000 |
| Indexed assets managed | $69,000,000 |
| Dedicated assets | $168,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 150 |
| Types of accounts managed | CEFGU |
| No. of portfolio managers | 10 |
| Size of research staff | 4 |

Corporate Investment Associates Inc., a Canadian firm, is an equity, fixed-income, balanced and real estate manager.

Its equity approach is sector rotational and value oriented. Sector weightings are made based on the capital markets outlook; stock selection is based on strict fundamentals.

Its fixed-income approach is active. About half of the portfolios represent a diversified core reflecting the long-term outlook; the balance reflects the 3-month cyclical outlook and is invested in marketable bonds.

In real estate, well-located multitenanted buildings in major urban areas with 7.5%+ initial income return are used. Leverage is used to a modest degree using long-term, fixed-rate financing. The acquisition process includes 15-year IRR analysis using a hurdle rate related to long-term bond yields.

The asset mix Jan. 1 was 33% Canadian stocks, 13% U.S. and foreign stocks, 32% bonds, 5% cash, 5% equity real estate, 7% mortgages and 5% direct energy investments; $69 million was in equity indexed funds.

The parent is Royal Trustco Ltd.

Stephan Donihee is chief investment officer and client contact.

## Corporate Property Investors

305 E. 47th St., New York, N.Y. 10017; (212) 421-8200

| | |
|---|---|
| Total assets managed | $3,800,000,000 |

"We wanted a shop that produced first quartile international fixed income performance for the past three-year period."

"So who'd you choose?"

"Chase Investors' International Shop...obviously!"

For information about Chase Investors' "Shops Within a Shop" concept, call Joe Martino 212-730-3359.

| | |
|---|---|
| Tax-exempt assets managed | $2,200,000,000 |
| Real estate assets managed | $2,200,000,000 |
| Tax-exempt clients | 30 |
| Types of accounts managed | CEFG |

Corporate Property Investors, an equity-oriented real estate investment trust, concentrates its portfolio in 28 regional shopping centers and two office buildings.

All assets were invested in equity real estate Jan. 1.

Clients include AT&T, Exxon, Ford Foundation and Yale.

Hans C. Mautner, chairman and president, is chief investment officer; Warren G. Hamer, director-investor relations, is client contact.

## County NatWest Management Ltd.

Fenchurch Exchange 43-44 Crutched Friars, London, England EC3N 2NX; 011-44-1-374-3000

| | |
|---|---|
| Total assets managed | $15,194,000,000 |
| Tax-exempt assets managed | $134,000,000 |
| International assets managed | $24,000,000 |
| Index funds managed | $78,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 3 |
| Types of accounts managed | C |
| No. of portfolio managers | 54 |
| Size of research staff | 22 |

County NatWest Investment Management Ltd. is an equity, fixed-income, balanced and international manager.

For equities, the international diversification program emphasizes active market allocation through passive stock selection using its market representative index funds. Quantitative techniques are used.

The fixed-income approach is top-down with emphasis on market allocation, emphasizing interest rate anticipation, yield curve analysis, currency allocation and high-quality instruments.

Options, stock index futures and fixed-income futures are used.

The firm provides portfolio insurance covering $188 million in assets.

The parent company is NatWest Investment Bank.

Christine Downton, chief executive, is the chief investment officer; Margaret Waller, vice president-marketing, is the client contact.

## Courier Capital Corp.

976 Delware Ave., Buffalo, N.Y. 14209; (716) 883-9595

| | |
|---|---|
| Total assets managed | $320,000,000 |
| Tax-exempt assets managed | $200,000,000 |
| Real estate assets managed | $10,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 80 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 5 |
| Size of research staff | 3 |

Courier Capital Corp. is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented, using emerging growth and low p/e stocks and market timing. It focuses on companies that are likely beneficiaries of existing economic trends and are statistically undervalued relative to either earnings or assets.

Its fixed-income approach is passive and based on interest rate anticipation.

It follows 40 stocks closely and 100, generally.

Francis G. Leonard is chief investment officer and client contact.

## Cowen Asset Management

Financial Square - 28th Floor, New York, N.Y. 10005; (212) 495-6650

| | |
|---|---|
| Total assets managed | $190,000,000 |
| Tax-exempt assets managed | $100,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 144 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 4 |
| Size of research staff | 2 |

Cowen Asset Management is an equity and balanced manager.

Its equity income approach seeks companies with above-market yields, prospects of future dividend growth and balance sheet strength. Its valuation approach focuses on undervalued assets, cash flow and earnings momentum. Options are used.

Its fixed-income approach is passive, emphasizing preservation of capital. Staggered maturities and short duration neutralize interest rate impact.

The parent is Cowen & Co.

William R. Church is the chief investment officer; Douglas B. Baran, vice president, is the client contact.

## The Crabbe-Huson Co.

1211 S.W. Fifth Suite 2900, Portland, Ore. 97204; (503) 295-0111

| | |
|---|---|
| Total assets managed | $260,000,000 |
| Tax-exempt assets managed | $230,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 25 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 3 |
| Size of research staff | 3 |

The Crabbe-Huson Co. is an equity, fixed-income and balanced manager.

Its equity approach is price-sensitive, risk-averse and contrarian, buying larger-cap stocks in concentrated portfolios at substantial discounts from price peaks with an identifiable catalyst for price advance.

For fixed income, the firm uses a contrarian approach to distinguish turning points in interest rates. Short to medium maturities are stressed, with sector swapping and arbitrage used to improve total return.

Clients include Blue Cross/Blue Shield-Oregon and Duplex Products.

James E. Crabbe, president, is chief investment officer. The client contact is James C. Vogelzang, Vogelzang & Associates, 600 17th St. Suite 2325S, Denver, Colo. 80202; (303) 629-1900.

## Cramblit & Carney Inc.

523 W. Sixth St. Suite 1134, Los Angeles, Calif. 90014; (213) 680-0562

| | |
|---|---|
| Total assets managed | $650,000,000 |
| Tax-exempt assets managed | $512,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 33 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 5 |

Cramblit & Carney Inc. is an equity, fixed-income and balanced manager.

Its equity approach is based on growth and low p/e stock strategies. Its fixed-income approach uses sector analysis.

The asset mix Jan. 1 was 42% stocks, 30% bonds and 28% cash.

The firm follows 100 stocks closely and 300, generally; 25% of the research is generated internally.

Clients include Provision Workers, Claremont University Center, Screen Actors Guild-Producers and 20th Century Fox Film.

Richard P. Carney is chief investment officer; Barry T. Seymour is client contact.

## Cramer Rosenthal McGlynn

520 Madison Ave., New York, N.Y. 10022; (212) 838-3830

| | |
|---|---|
| Total assets managed | $295,000,000 |
| Tax-exempt assets managed | $116,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 22 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

Cramer Rosenthal McGlynn Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses sector rotation and Graham & Dodd analysis on emerging growth and low p/e stocks. Its fixed-income approach uses interest rate anticipation with emphasis on short-term U.S. government obligations.

Options and stock index futures are used.

Clients include Columbia University, Georgia Pacific and the NBA.

Gerald Cramer is chief investment officer; Ernest A. Remig, marketing representative, is client contact.

## Crawford Investment Counsel Inc.

100 Galleria Parkway N.W. Suite 980, Atlanta, Ga. 30339; (404) 859-0045

| | |
|---|---|
| Total assets managed | $208,000,000 |
| Tax-exempt assets managed | $174,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 20 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

Crawford Investment Counsel Inc., an equity manager, focuses on a dividend growth style. Portfolios have an above-average current yield and an above-average dividend growth rate, which results in downside protection and low volatility.

It follows 100 stocks closely and 500, generally; 80% of research is generated internally.

John H. Crawford, president, is chief investment officer; Sarah Jane Ross is client contact.

## Credit Suisse Asset Management

280 Park Ave. 27th Floor, New York, N.Y. 10017; (212) 557-0510

| | |
|---|---|
| Total assets managed | $100,000,000 |
| Tax-exempt assets managed | $75,000,000 |
| International assets managed | $75,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 8 |
| Types of accounts managed | CF |
| No. of portfolio managers | 4 |
| Size of research staff | 6 |

### 25 largest managers ranked by equity index funds

| Firm | $ millions |
|---|---|
| Wells Fargo | 31,111 |
| Bankers Trust | 18,547 |
| Mellon Capital | 13,000 |
| State Street Bank | 9,280 |
| American Nat'l/Chicago | 7,400 |
| Alliance Capital | 3,939 |
| GE Investments | 3,000 |
| Manufacturers Nat'l/Detroit | 2,855 |
| Dimensional Fund Advisors | 2,850 |
| Wilshire Asset | 2,500 |
| Sears Investment | 1,225 |
| Northern Investment | 918 |
| Prudential Asset | 890 |
| BEA Associates | 553 |
| Bernstein-Macaulay | 519 |
| Chase Investors | 515 |
| Vanguard Group | 470 |
| ASB Capital | 423 |
| First RepublicBank | 370 |
| Axe-Houghton | 343 |
| Capstone Asset | 340 |
| Citicorp Investment | 335 |
| Centerre Trust | 290 |
| Harris Trust & Savings | 250 |
| Boston Co. | 230 |
| **Total** | **102,153** |

Credit Suisse Asset Management is an international equity manager.

Its equity approach emphasizes international bottom-up growth stocks with top-down global investment themes and country/currency orientation.

Currency hedging, using forward currency contracts, is used.

The firm follows 60 stocks closely and 120, generally; 65% of research is generated internally.

The parent is Credit Suisse.

Gordon L. Bowyer is president and chief investment officer; Richard R. Smith, vice president, is client contact.

## Crestar Bank

919 E. Main St., Richmond, Va. 23261-6555; (804) 782-7405

| | |
|---|---|
| Total assets managed | $3,200,000,000 |
| Tax-exempt assets managed: | |
| Total | $110,000,000 |
| Commingled | $10,000,000 |
| Separate | $100,000,000 |
| Real estate assets managed | $5,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients: | |
| Commingled | 30 |
| Separate | 80 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |

Crestar Bank is an equity, fixed-income and balanced manager.

The bank's equity approach uses sector rotation, purchasing undervalued securities in sectors that should benefit from anticipated economic cycles.

Its fixed-income approach uses high-quality bonds and varies maturity according to interest rate projections.

The parent company is Crestar Financial Corp.

David A. Halloran, vice president, is chief investment officer; Gordon R. Boardway, vice president, is client contact.

## Criterion Investment Management Co.

1000 Louisiana, Houston, Texas 77002; (713) 751-2400

| | |
|---|---|
| Total assets managed | $8,598,000,000 |
| Tax-exempt assets managed | $8,432,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 130 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 18 |
| Size of research staff | 12 |

Criterion Investment Management Co. is an equity, fixed-income and balanced manager.

Its equity approach focuses on determining the relative attractiveness of stocks vs. cash equivalents along with identifying concepts and investment themes that will positively affect industry sectors and groups.

Its fixed-income approach uses a proprietary computer system to evaluate and monitor the risk/reward relationship of individual bonds and bond portfolios.

Options, stock index futures and fixed-income futures are used.

In addition to its total assets managed, $3.1 billion is managed on its behalf by an affiliate, Criterion Funds.

The firm follows 150 stocks generally.

The parent company is the Criterion Group.

Clients include Arizona, Continental Airlines, Nevada and Shell Oil.

Charles Miller, chairman, is chief investment officer; John R. Pipkin, director of marketing, is client contact.

## Crown Life Insurance Co. — U.S. Pensions

201 N. Union St., Alexandria, Va. 22314; (703) 684-4100

| | |
|---|---|
| Total assets managed | $2,530,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,748,000,000 |
| GICs | $1,580,000,000 |
| Other | $168,000,000 |
| 401(k)/457 assets managed | $90,000,000 |
| Tax-exempt clients | 10 |

Crown Life Insurance Co. — U.S. Pensions is an equity, fixed-income and GIC manager.

Its equity approach uses Graham & Dodd analysis and low p/e stocks. Its fixed-income approach uses interest rate anticipation and sector analysis.

The parent company is CrownX.

A.G. Wirth, senior vice president-investments, is chief investment officer. John Mullis, assistant vice president and director of sales, is client contact.

## C&S Investment Advisors

P.O. Box 4114, Atlanta, Ga. 30302; (404) 897-3306

| | |
|---|---|
| Total assets managed | $3,200,000,000 |
| Tax-exempt assets managed | $1,947,000,000 |
| Real estate assets managed | $12,000,000 |
| Index funds managed | $11,000,000 |
| Dedicated funds managed | $10,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 44 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 14 |
| Size of research staff | 6 |

C&S Investment Advisors Inc. is an equity, fixed-income, balanced and quantitative services manager.

It offers passive and value-oriented equity approaches. The value discipline focuses on low p/e multiples.

Its fixed-income approach uses sector and technical analysis, selecting securities to preserve capital while obtaining a high rate of current income.

Options and stock index futures are used.

The asset mix Jan. 1 was 68.2% stocks, 12.4% bonds, 18.8% cash, 0.1% mortgages and 0.5% mortgage-backed securities; $11 million was in equity indexed funds.

It follows 300 stocks closely and 1,000 generally; 20% of research is generated internally.

The parent company is Citizens & Southern Corp.

James L. Kermes, president, is chief investment officer; K. David Wheeler, vice president/director of marketing and sales, is client contact.

### Key to abbreviations

C: Corporate account
E: Educational endowments
F: Private foundations
G: U.S. state and local gov'ts
J: Jointly trusteed
P: Canadian provincial gov'ts
U: Unions (Canadian firms only)

## CT Investment Counsel Inc.

110 Yonge St. Suite 800, Toronto, Ontario M5C 1T4; (416) 869-5931

| | |
|---|---|
| Total assets managed | $2,707,000,000 |
| Tax-exempt assets managed | $2,020,000,000 |
| Non-North American assets | $3,000,000 |
| Dedicated assets | $131,000,000 |
| Minimum separate account | $4,000,000 |
| Tax-exempt clients | 438 |
| Types of accounts managed | CEGU |
| No. of portfolio managers | 7 |
| Size of research staff | 8 |

CT Investment Counsel Inc., a Canadian firm, is an equity, fixed-income and balanced manager.

Its equity approach emphasizes growth and low p/e stocks. Sector rotation and market timing are applied.

Its fixed-income approach primarily emphasizes interest rate anticipation with sector/credit trading.

The asset mix Jan. 1 was 44% Canadian stocks, 4.5% U.S. stocks, 45% bonds, 6% cash and 0.5% non-North American equities.

It follows 75 stocks closely and another 175, generally; 60% of research is generated internally.

The parent company is The Canada Trust Co.

W. James Blowers, president, is chief investment officer and client contact.

## Cullen Center Bank & Trust

P.O. Box 1315, Houston, Texas 77251; (713) 652-7600

| | |
|---|---|
| Total assets managed | $191,000,000 |
| Tax-exempt assets managed: | |
| Total | $85,000,000 |
| Commingled | $81,000,000 |
| Separate | $4,000,000 |
| Real estate assets managed | $18,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients: | |
| Commingled | 73 |
| Separate | 7 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

Cullen Center Bank & Trust is an equity, fixed-income and balanced manager.

Its equity approach is a composite of multiple relative valuation models with beta-adjusted price momentum and volume-adjusted historical price channels.

Its fixed-income approach analyzes quality and industry sectors combined with economic and interest rate cycle forecasts.

The parent is Cullen/Frost Bankers.

Robert B. McAshan III, senior vice president, is chief investment officer; Michael L. Daugherty, executive vice president, is the client contact.

## Cumberland Advisors

614 Landis Ave., Vineland, N.J. 08360; (609) 692-6690

| | |
|---|---|
| Total assets managed | $149,000,000 |
| Tax-exempt assets managed | $68,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 180 |
| Types of accounts managed | CF |
| No. of portfolio managers | 3 |
| Size of research staff | 3 |

Cumberland Advisors Pty. is an equity, fixed-income and balanced manager.

It uses Graham & Dodd analysis on low p/e stocks, together with sector rotation and market timing in its top-down equity approach. Its analysis has a monetarist bias. Options are used.

Its top-down fixed-income approach integrates interest rate anticipation, sector analysis and duration.

Clients include Alperin and Cruciani.

Sheldon E. Goldberg, general partner, is chief investment officer; Donald E. Sulam, general partner, and Suzanne N. Greenberg, investment adviser, are client contacts.

## John M. Cunningham Inc.

200 Eagle Road Suite 204, Wayne, Pa. 19087; (215) 687-5060

| | |
|---|---|
| Total assets managed | $17,000,000 |

Tax-exempt assets managed ..... $10,000,000
Minimum separate account ..... $50,000
Tax-exempt clients ..... 35
Types of accounts managed ..... C
No. of portfolio managers ..... 1

John M. Cunningham Inc. is an equity, fixed-income and balanced manager.

Its growth stock equity approach is based on Graham & Dodd principles and is combined with sector rotation, concentrating on industry analysis and buying dividend and earnings growth leaders. The fixed-income approach uses interest rate anticipation, following the market fundamentally and technically.

The firm follows 50 stocks closely and 2,000, generally; all research is generated internally.

John M. Cunningham is the chief investment officer and client contact.

### Curran Capital Management
280 Park Ave. W. 27th Floor, New York, N.Y. 10017; (212) 972-0704

Total assets managed ..... $12,000,000
Tax-exempt assets managed ..... $0
Minimum separate account ..... $1,000,000
No. of portfolio managers ..... 1

Curran Capital Management, an equity manager, takes a growth stock approach, specializing in health care companies. Options are used.

It follows 30 stocks closely; all research is generated internally.

John P. Curran is chief investment officer and client contact.

### Martin Currie Ltd. & Subsidiaries
29 Charlotte Square, Edinburgh, Scotland EH2 4HA; 031-225-3811

Total assets managed ..... $3,565,000,000
Tax-exempt assets managed ... $250,000,000
International assets managed .. $249,000,000
Minimum separate account ..... $15,000,000
Tax-exempt clients ..... 5
Types of accounts managed ..... C
No. of portfolio managers ..... 12
Size of research staff ..... 7

Martin Currie Ltd. & Subsidiaries is an equity and international manager.

Its equity approach emphasizes emerging growth and growth stocks, focusing on long-term growth opportunities and using sector rotation. The approach varies according to the particular market in which assets are invested. Options are used.

U.K. fixed-income securities are used only to fulfill requirements of endowment clients. Buys/sells are dictated by interest rate expectations.

The firm follows 600 stocks closely and 800, generally; 20% of the research is generated internally.

The parent is Martin Currie Ltd.

David Skinner, managing director, is chief investment officer; Michael Kennedy, president of Martin Currie Inc., is client contact.

### Cushman & Wakefield Realty Advisors Inc.
1166 Avenue of the Americas, New York, N.Y. 10036; (212) 841-7750

Total assets managed ..... $1,300,000,000
Tax-exempt assets managed ..... $0
Minimum separate account ..... $50,000,000

Cushman & Wakefield Realty Advisors Inc. is a real estate manager that capitalizes on its expertise in leasing, property management and appraisal, as well as its geographic scope and coverage in primary and secondary markets.

Its parent is Cushman & Wakefield Inc.

Joseph J. Del Casino is client contact.

### Cutler & Co. Inc.
132 W. Main St. Suite 204, Medford, Ore. 97501; (503) 779-5055

Total assets managed ..... $470,000,000
Tax-exempt assets managed ... $422,000,000
Minimum separate account ..... $1,000,000
Tax-exempt clients ..... 254
Types of accounts managed ..... CEFJG
No. of portfolio managers ..... 1
Size of research staff ..... 1

Cutler & Co. Inc., an equity manager, focuses on high-yielding, high-quality portfolios, treating them as bond portfolios. Portfolios are characterized by low p/e, low beta and low market-to-book ratios.

The firm follows 20 stocks closely and 90, generally; all research is generated internally.

Clients include Oregon, Kern County, Pennsylvania Teachers and Mapco.

Kenneth R. Cutler is the chief investment officer; Mark S. Patten, executive vice president, is the client contact.

## D

### D.A. Management Inc.
7777 Center Ave. Suite 500, Huntington Beach, Calif. 92647; (714) 891-6080

Total assets managed ..... $91,000,000
Tax-exempt assets managed .... $91,000,000
Real estate assets managed ..... $43,000,000
Minimum separate account ..... $10,000,000
Tax-exempt clients ..... 3
Types of accounts managed ..... JG
No. of portfolio managers ..... 4
Size of research staff ..... 1

D.A. Management Inc., a real estate manager, acquires equity and participating loan interests that have the potential of generating operating cash flow and profits through financial structure, property management and personal involvement.

Clients include Orange County Employees, San Bernardino County Employees and Alaska Teamsters Pension Fund.

Daniel M. Ardell is chief investment officer and client contact.

### Daiwa International Capital Management Corp.
200 Liberty St. 26th Floor, New York, N.Y. 10281; (212) 945-0099

Total assets managed ..... $16,602,000,000
Tax-exempt assets managed ... $448,000,000
International assets managed .. $448,000,000
Minimum separate account ..... $5,000,000
Tax-exempt clients ..... 7
Types of accounts managed ..... CG
No. of portfolio managers ..... 52
Size of research staff ..... 4

Daiwa International Capital Management Corp. is an equity, balanced, international manager.

A research-oriented active equity manager, the firm's stock selection concentrates on assessing the long-term growth potential and the relative value of companies within growth industries worldwide. In addition, the firm and Roll and Ross Asset Management co-offer a quantitative investment product based on the Arbitrage Pricing Technique.

The parent is Daiwa International Capital Management Co. Ltd.

Clients include Hawaii Employees, GM, Pacific Lighting and Oregon Public Employes.

Keisuke Oshima, senior managing director-investments, is chief investment officer; Robert Russell, executive vice president, and Shunsuke Ichijo, senior vice president, are client contacts.

### Dana Investment Advisors
330 S. Executive Drive, Suite 301, Brookfield, Wis. 53005; (414) 782-3631

Total assets managed ..... $250,000,000
Tax-exempt assets managed ... $200,000,000
Real estate assets managed .... $132,000,000
Dedicated funds managed ..... $10,000,000
Minimum separate account ..... $2,000,000
Tax-exempt clients ..... 52
Types of accounts managed ..... CEFJG
No. of portfolio managers ..... 3

Dana Investment Advisors is an equity, fixed-income and balanced manager.

Its risk-averse management approach emphasizes growth and income stocks. It is value-oriented on a total rate of return basis.

The firm is an active fixed-income manager, looking to extract current value and keep interest rate (movement) risk to a minimum; variable rate government-backed securities are used extensively.

Michael L. Dana, president, is the chief investment officer; Donald J.


# *We don't react at the drop of an interest rate.*

Successful investing depends a lot more upon how well you react to market changes than upon how quickly.

This is not to say that we don't change as conditions change. We do. We just don't believe that something as important as your retirement fund portfolio should be altered by short term factors.

Our goal is to deliver long term growth through equity investments and prudent portfolio balance through sound fixed-income management. We believe we're uniquely qualified to meet these objectives.

Because at David L. Babson & Company, we have a very simple philosophy: the best way to achieve investment success is to start with the best people. And then give them the resources and the power to make decisions. Informed decisions.

How do we attract and keep the best people? By giving them the opportunity literally to be a part of the company. Our company is owned by the active members of the professional staff, none of whom own as much as 15% of the stock.

The result of having top-quality people is being able to create top-quality, low-risk, growth equity and fixed-income portfolios.

For example, we offer real estate investments that are an excellent way to diversify your retirement fund portfolio. Choose from a closed-end pooled fund or from separate investments. In either case, the goal is low-risk growth.

We have recently introduced further diversification through investment in international markets. Reduce risk and broaden your opportunity by choosing an international mutual fund, a group trust for pension portfolios, or separate investments.

We also offer separately managed portfolios (similar to the Babson Enterprise Fund) of companies with small market capitalizations. These are companies that fill a niche in their particular industry. Companies in which management holds a large stake.

So if you're looking for sound investments with limited risk for your retirement fund portfolio, consider David L. Babson. Because good performance depends on good planning. And you can't develop a plan without solid investment decisions.

For more information about what we can do for you, call Peter Thompson, President, at (617) 225-3800. Or write: David L. Babson & Company, Inc., One Memorial Drive, Cambridge, MA 02142.

**David L. Babson & Company, Inc.**
*The person you talk to owns the company.*

PROFILES

Moore, senior vice president, is the client contact.

### John Stewart Darrell & Co.
503 Faulconer Drive, Charlottesville, Va. 22901; (804) 977-7010

| | |
|---|---|
| Total assets managed | $60,000,000 |
| Tax-exempt assets managed | $14,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 15 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

John Stewart Darrell & Co. is an equity, fixed-income and balanced manager. Its equity approach uses low p/e stocks and Graham & Dodd analysis; its fixed-income approach uses interest rate anticipation.

Jack Darrell, senior investment manager, is chief investment officer and client contact.

### Dauphin Deposit Bank & Trust Co.
213 Market St., Harrisburg, Pa., 17105; (717) 255-2254

| | |
|---|---|
| Total assets managed | $691,000,000 |
| Tax-exempt assets managed: | |
| Total | $341,000,000 |
| Commingled | $266,000,000 |
| Separate | $75,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients: | |
| Commingled | 219 |
| Separate | 105 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 4 |
| Size of research staff | 2 |

Dauphin Deposit Bank & Trust Co. is an equity, fixed-income and balanced manager.

Its value-oriented equity approach emphasizes both fundamental and technical analysis of business sectors and individual companies using a variety of techniques to determine relative value. Its fixed-income approach uses interest rate anticipation and sector analysis, with an emphasis on quality and liquidity of issues. Maturities are of 10 years or less.

Clients include Harsco, Daily Industries and Capital Blue Cross.

The parent is Dauphin Deposit.

Robert M. Spicer, senior vice president, is chief investment officer; Andrew W. Wesler, new business officer, is client contact.

### Davenport Asset Management
P.O. Box 1377, Richmond, Va. 23211; (804) 780-2117

| | |
|---|---|
| Total assets managed | $169,000,000 |
| Tax-exempt assets managed | $65,000,000 |
| Minimum separate account | $200,000 |
| Tax-exempt clients | 46 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 6 |
| Size of research staff | 4 |

Davenport Asset Management is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented, following Graham & Dodd principles. The beta of equities is low, reflecting a bias toward low p/es and higher current yields.

Treasuries typically are used in balanced accounts with a maturity spread designed to diversify rate exposure. For fixed income, it emphasizes sector selection.

The parent is Davenport & Co. of Virginia, Inc.

Joseph L. Antrim, executive vice president, is chief investment officer; Nancy P. Jenkins is client contact.

### Davis, Weaver & Mendel Inc.
5600 Glenridge Drive, Suite 200, Atlanta, Ga. 30350; (404) 252-0077

| | |
|---|---|
| Total assets managed | $133,000,000 |
| Tax-exempt assets managed | $99,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 76 |
| Types of accounts managed | CF |
| No. of portfolio managers | 2 |
| Size of research staff | 8 |

Davis, Weaver & Mendel Inc. is an equity, fixed-income, balanced and international manager.

Its equity approach emphasizes market timing and sector rotation. The investment process is disciplined, based on computer-generated models.

Its fixed-income approach, based on interest rate anticipation, stresses active management. Maturity management is used to enhance profitability.

Clients include National Service Industries, Baptist Sunday School Board and Kansas City Southern Industries.

Thomas H. Weaver, president, is chief investment officer; Marsh Douthat, executive vice president, is client contact.

### Dawes Investment Service
900 E. Indiantown Road Suite 305, Jupiter, Fla. 33477; (305) 747-0696

| | |
|---|---|
| Total assets managed | $53,000,000 |
| Tax-exempt assets managed | $39,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 39 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

Dawes Investment Service Inc. is an equity manager.

Its highly disciplined, value-oriented equity strategy uses low p/e stocks and sector rotation. A proprietary mathematical model identifies buy points and sell objectives.

The firm follows 200 stocks closely and 6,000, generally; all research is generated internally.

Richard C. Sunshine, president, is the chief investment officer; Kristy J. Dodge, director of marketing and client services, is the client contact.

### Dean Investment Associates
2480 Kettering Tower, Dayton, Ohio 45423; (513) 222-9531

| | |
|---|---|
| Total assets managed | $908,000,000 |
| Tax-exempt assets managed | $740,000,000 |
| 401(k)/457 assets managed | $11,000,000 |
| 401(k)/457 clients | 8 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 54 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 14 |
| Size of research staff | 3 |

Dean Investment Associates is an equity and balanced manager.

Its equity approach uses growth and low p/e stocks based on Graham & Dodd analysis, sector rotation and market-timing techniques. The firm combines a top-down approach with fundamental and technical methodologies in selecting securities and establishing optimal asset allocation targets.

The asset mix Jan. 1 was 65% stocks, 25% bonds and 10% cash.

The firm follows 130 stocks closely and 250 generally; all research is generated internally.

The parent company is C.H. Dean & Associates Inc.

Dennis D. Dean, executive vice president, is chief investment officer; Richard M. Luthman, vice president, is client contact.

### Dearden, Maguire and Weaver Inc.
2 Penn Center Plaza Suite 1702, Philadelphia, Pa. 19102; (215) 972-0688

| | |
|---|---|
| Total assets managed | $510,000,000 |
| Tax-exempt assets managed | $275,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 40 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 5 |
| Size of research staff | 1 |

Dearden, Maguire and Weaver Inc. is an equity, fixed-income, balanced and bank portfolio and trust manager.

Its equity approach invests in growth stocks based on Graham & Dodd principles. The firm is quality-oriented based on economic outlook, relative valuation analysis and fundamental and technical data. Options are used.

Its fixed-income approach uses interest rate anticipation. Portfolios are limited to securities with A or better ratings and maturities of 10 years or less.

The firm follows 150 stocks closely and 250, generally; 20% of the research is generated internally.

Edward C. Dearden, president, James M. Weaver, treasurer, and Alexander A. Maguire, secretary, are the chief investment officers; Mr. Dearden is the client contact.

### Debenham Tewson & Chinnocks Inc.
450 Park Ave. Suite 1902, New York, N.Y. 10022; (212) 758-8218

| | |
|---|---|
| Total assets managed | $375,000,000 |
| Tax-exempt assets managed | $0 |
| No. of portfolio managers | 3 |

Debenham Tewson & Chinnocks, Inc., a real estate manager, seeks undervalued and underperforming assets, and is countercyclical-acquisition oriented.

The parent company is Debenham Tewson & Chinnocks PLC.

C.J. Wood, director, is the chief investment officer and client contact.

### DeJarnette Investment Advisors
104 Black Rock Drive, Wintergreen, Va. 22958-0418; (804) 325-1180

| | |
|---|---|
| Total assets managed | $14,000,000 |
| Tax-exempt assets managed | $6,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 17 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

DeJarnette Investment Advisors is an equity, fixed-income and balanced manager.

Its equity approach uses emerging growth stocks. The firm emphasizes regional securities in the Southeast. Options are used. Its fixed-income approach uses interest rate anticipation.

The firm follows 30 stocks closely and 75, generally; 50% of research is generated internally.

J.H. DeJarnette is the chief investment officer and client contact.

### Delafield Asset Management
63 Wall St., New York, N.Y. 10005; (212) 269-0660

| | |
|---|---|
| Total assets managed | $954,000,000 |
| Tax-exempt assets managed | $386,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 23 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 2 |
| Size of research staff | 3 |

Delafield Asset Management Inc. is an equity manager.

Using Graham & Dodd analysis, its equity approach is conservative and value-oriented with an emphasis on special situations and undervalued investments purchased at measured prices to limit market risk.

The firm follows 50 stocks closely and 200, generally; 99% of the research is generated internally.

Clients include Aerospace, Agway, Eastern Airlines and the American Red Cross.

J. Dennis Delafield, president, is chief investment officer; Alice B. Hicks, vice president, is client contact.

Consultants: Oct. 17.

### Delaware Investment Advisers
1 Commerce Square, Philadelphia, Pa. 19103; (215) 568-5860

| | |
|---|---|
| Total assets managed | $11,434,000,000 |
| Tax-exempt assets managed | $11,216,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 216 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 17 |

Delaware Investment Advisers is an equity, fixed-income and balanced manager.

Its equity approach combines sector rotation with low p/e and value/equity income strategies. Its philosophy stresses risk management within a total-rate-of-return orientation.

Its fixed-income approach uses equity-type credit analysis, a sensitivity to business cycles and sophisticated trading strategies to protect the income premium on high-yielding corporate bonds.

The asset mix Jan. 1 was 82% stocks, 11% bonds and 7% cash.

The firm follows 150 stocks closely and 350, generally; 35% of research is generated internally.

The parent company is Delaware Management Co.

Clients include Ameritech, Father Flanagan's Boys' Home, GM and Dartmouth.

John H. Durham, chief executive officer, is chief investment officer; Winthrop S. Jessup, senior vice president, is client contact.

### Delta Financial Inc.
3500 Pacific Ave., Box 539, Virginia Beach, Va. 23451; (804) 491-1200

| | |
|---|---|
| Total assets managed | $105,000,000 |
| Tax-exempt assets managed | $92,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 23 |
| Types of accounts managed | C |
| No. of portfolio managers | 4 |
| Size of research staff | 4 |

Delta Financial Inc. is an equity, fixed-income and balanced manager.

Its equity approach is quantitative. The firm uses an explicit quantitative discipline to seek value, resulting in portfolios that reflect current economic themes.

Its fixed-income approach is core-tactical, emphasizing duration shifts.

It uses options, stock-index futures and fixed-income futures.

The firm follows 100 stocks closely and 2,500, generally; all research is generated internally.

Mark T. Finn, president, is chief investment officer; Katie Lincoln, marketing representative, is client contact.

### Delta Financial Management
37 Derby St., Hingham, Mass. 02043; (617) 749-8156

| | |
|---|---|
| Total assets managed | $50,000,000 |
| Tax-exempt assets managed | $37,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 22 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 2 |

Delta Financial Management Corp. is an equity, fixed-income and balanced manager.

It follows a low-risk, conservative investment philosophy. The equity approach focuses on low p/e stocks with above-average yields. Fixed-income investing concentrates on high-quality bonds with maturities of 10 years or less.

The firm follows 250 stocks closely; 80% of the research is generated internally.

William M. Weldon is client contact.

### D.F. Dent & Co. Inc.
2 E. Read St., Baltimore, Md. 21204; (301) 837-2545

| | |
|---|---|
| Total assets managed | $253,000,000 |
| Tax-exempt assets managed | $94,000,000 |
| International assets managed | $14,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 33 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 3 |

D.F. Dent & Co. Inc., an equity and balanced manager, uses emerging growth and growth stocks in its equity approach.

The firm follows 60 stocks closely


Investment Advisors...
to employee benefit plans, foundations, endowments and substantial individuals.

Our basic investment philosophy – the prudent investment of assets in undervalued securities and special situations – was established a half century ago. This approach has preserved and appreciated capital over many market cycles.

David J. Greene and Company
Registered Investment Advisors
30 Wall Street, New York, NY 10005
Member New York Stock Exchange

and 120, generally; 85% of research is generated internally.

T.F. O'Neil Jr., vice president, is the chief investment officer; S.C. Ellwood, vice president, is the client contact.

### Denver Investment Advisors

633 17th St., Suite 1800, Denver, Colo. 80270; (303) 293-5588

| | |
|---|---|
| Total assets managed | $3,700,000,000 |
| Tax-exempt assets managed | $3,449,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 86 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 7 |
| Size of research staff | 7 |

Denver Investment Advisors Inc. is an equity, fixed-income, balanced and money market manager.

Its equity approach is bottom-up, fundamental and quantitative. The focus is on small- and midsize companies and large-cap stocks that are mispriced. Graham & Dodd analysis is used.

In fixed income, the firm segments the market into three distinct duration categories; within each, sector and individual bond selection is emphasized. Asset allocation is used to adjust duration.

The asset mix Jan. 1 was 49% stocks, 46% bonds and 5% cash.

The firm follows 130 stocks closely and 300, generally; 70% of the research is generated internally.

The parent company is First Interstate Bank of Denver.

Clients include AT&T, California Teachers, US West and Rohm and Haas.

Kenneth Penland is chief investment officer; Dennis Larkin, vice president-marketing, is client contact.

### Derby & Co. Inc.

57 Wells Ave., Newton, Mass. 02159; (617) 332-2449

| | |
|---|---|
| Total assets managed | $33,000,000 |
| Tax-exempt assets managed | $30,000,000 |
| Real estate assets managed | $3,000,000 |
| Dedicated funds managed | $11,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 31 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |

Derby & Co. Inc. is a fixed-income manager whose investment approach is based on interest rate anticipation.

All research is generated internally.

Burt Derby is chief investment officer and client contact.

### Derivative Markets Management Inc.

30 S. Wacker Suite 2816, Chicago, Ill. 60606; (312) 461-6200

| | |
|---|---|
| Total assets managed | $148,000,000 |
| Tax-exempt assets managed | $145,000,000 |
| Index funds managed | $28,000,000 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Derivative Markets Management Inc. provides active management of equity securities employing index funds, stock index options and futures. Incremental returns are earned through option hedges and futures arbitrage. Policy guidelines are client-tailored.

The firm follows the S&P 500 index stocks closely; 50% of research is generated internally.

The parent is Harris Bankcorp. Inc.

Clients include Ameritech and Harris Trust & Savings Bank Cyclical Timing Fund.

Edward B. Dillmann is chief investment officer and client contact.

### Dewey Square Investors

P.O. Box 1727, Boston, Mass. 02105; (617) 434-6217

| | |
|---|---|
| Total assets managed | $3,600,000,000 |
| Tax-exempt assets managed | $3,600,000,000 |
| 401(k)/457 assets managed | $150,000,000 |
| 401(k)/457 clients | 100 |
| Real estate assets managed | $130,000,000 |
| Dedicated funds managed | $420,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 100 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 11 |

Dewey Square Investors is an equity, fixed-income and balanced manager.

Its equity approach is quantitative and low p/e. It constructs highly diversified portfolios built of stocks with high relative valuation rank and poor past price behavior.

Its fixed-income approach uses a proprietary economic cycle approach to determine primary interest rate trends and structure maturity allocation.

The asset mix Jan. 1 was 46% stocks, 32% bonds, 18% cash and 4% mortgage-backed securities.

The firm follows 100 stocks closely and 650, generally; 40% of the research is generated internally.

The parent is Bank of Boston.

Clients include Ford, American Airlines, Gillette and Raytheon.

William B. Moody, president, is chief investment officer; Caroline Hovey, director of marketing, is client contact.

### Dietche & Field Advisers

437 Madison Ave., New York, N.Y. 10022; (212) 752-2047

| | |
|---|---|
| Total assets managed | $187,000,000 |
| Tax-exempt assets managed | $154,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 5 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Dietche & Field Advisers Inc., an equity manager, uses Graham & Dodd analysis in its bottom-up approach. Managers seek undervalued companies undergoing significant change.

Clients include Boise Cascade, Baltimore and Tyndall North American Fund.

Paul Dietche, president, is chief investment officer; Lincoln P. Field, vice president, is client contact.

### Dillon, Read Capital Inc.

535 Madison Ave., New York, N.Y. 10022; (212) 906-7659

| | |
|---|---|
| Total assets managed | $1,941,000,000 |
| Tax-exempt assets managed | $1,490,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 41 |
| Types of accounts managed | CFJG |
| No. of portfolio managers | 5 |

Dillon, Read Capital Inc. is an equity and balanced manager.

Its equity approach emphasizes active asset allocation, using a price-sensitive, bottom-up stock selection approach in which securities of quality companies are bought when they are out of favor and undervalued. Cash will be raised when securities are overvalued or the trend to overall liquidity is negative.

In balanced accounts, fixed-income assets are actively managed, adjusting maturities depending on valuation and trends of liquidity. High-quality issues are used.

The asset mix Jan. 1 was 57% stocks, 2% bonds and 41% cash.

The firm follows 150 stocks closely and 300, generally; 75% of research is generated internally.

The parent is Dillon, Read & Co. Inc., which is owned by The Travelers Corp. In addition to the assets above, Dillon, Read Capital manages some commingled funds for its parent.

Clients include Hughes Aircraft, Alcoa and Illinois Municipal.

Timothy G. Dalton Jr., president, is chief investment officer; David A. Dewey, executive vice president, is client contact.

### Dimensional Fund Advisors

1299 Ocean Ave. Suite 650, Santa Monica, Calif. 90401; (213) 395-8005

| | |
|---|---|
| Total assets managed | $4,202,000,000 |
| Tax-exempt assets managed | $3,978,000,000 |
| International assets managed | $154,000,000 |
| Index funds managed | $3,824,000,000 |
| Minimum separate account | $50,000,000 |
| Tax-exempt clients | 112 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 6 |
| Size of research staff | 3 |

Dimensional Fund Advisors Inc. is an equity, fixed-income and international manager.

Its equity approach is passive. It invests in small companies to provide diversification and potential for long-term return premiums.

Its fixed-income approach uses a variable maturity strategy that maxi-


# Would You Really Trust Your Company's Master Trust To Someone Who Didn't Make It A Top Priority?

You know a Master Trust can save your company time, money and headaches by pooling investments and consolidating administration of your employee benefit funds. But at a lot of trust companies, you risk getting lost in the shuffle instead of getting the attention you need.

The solution? Centerre Trust Company of St. Louis.

We make it a top priority to treat each client as a top priority. No matter how big or small. And this approach works so well, we're a bit surprised our competition hasn't caught on.

A Centerre Master Trust gives you everything you'd expect from a full-service Master Trustee: Comprehensive accounting and reporting, an on-line inquiry system for timely information about your account, a cash management system that generates income from money that might otherwise sit idle, and a securities lending system to boost your return on assets even further.

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**CENTERRE TRUST COMPANY**

510 Locust Street, St. Louis, MO 63101

mizes expected returns by shifting maturities in response to changes in the current prices.

The asset mix Jan. 1 was 74% stocks, 24% fixed income and 2% cash. As of the same date, the firm had $154 million in foreign stocks, $2.85 billion in equity index funds and $974 million in fixed-income funds.

The firm follows 3,000 stocks closely and 3,000, generally; 90% of the research is generated internally.

Clients include GM, IBM, Maryland and California Public Employees.

Rex A. Sinquefield, chairman, is chief investment officer. David G. Booth, chairman and chief executive officer, is the client contact.

## Disciplined Investment Advisors Inc.

1800 Sherman Ave., Evanston, Ill. 60201; (312) 328-6707

| | |
|---|---|
| Total assets managed | $400,000,000 |
| Tax-exempt assets managed | $400,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 42 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 3 |

Disciplined Investment Advisors Inc., an equity manager, uses a value contrarian style based on quantitative, fundamental analysis of S&P 500 stocks.

The firm follows 500 stocks closely and 2,500, generally; all research is generated internally.

The firm's principals — William J. Breen, Eugene M. Lerner and Daniel J. Schweihs — comprise the investment committee. Mr. Schweihs is the client contact.

## Disciplined Portfolio Management Inc.

23 Center St., Chatham, N.J. 07928; (201) 635-0518

| | |
|---|---|
| Total assets managed | $0 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $5,000,000 |
| No. of portfolio managers | 2 |

Disciplined Portfolio Management Inc., an equity manager, takes a fundamental, systematic and disciplined approach, using a combination of Graham & Dodd and quantitative principles. Appropriate fundamental, qualitative, quantitative and technical ranks identify attractive investments. The process is reinforced by a rigorous sell discipline.

The firm follows 1,900 stocks closely and 1,900, generally.

Darley T. Randall, managing director, is the chief investment officer and the client contact.

## Discount Corp. of New York Advisers

58 Pine St., New York, N.Y. 10005; (212) 248-8989

| | |
|---|---|
| Total assets managed | $5,285,000,000 |
| Tax-exempt assets managed | $5,285,000,000 |
| 401(k)/457 assets managed | $232,000,000 |
| 401(k)/457 clients | 2 |
| Minimum separate account | $100,000,000 |
| Tax-exempt clients | 17 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 5 |
| Size of research staff | 11 |

Discount Corp. of New York Advisers is a fixed-income, international and options and futures manager.

Its fixed-income approach uses high credit-quality issues, shifting into securities of greater or lesser market risk based on anticipated interest rate moves. Investment policies are based on fundamental market analysis and technical factors. Portfolio managers refine broad investment policy, select specific instruments and execute transactions, allowing for active management of short- and long-term accounts and quick portfolio adjustments to preserve capital or to a benefit from profit opportunity.

Options and fixed-income futures are used.

The asset mix Jan. 1 was 25% bonds and 75% cash.

The parent company is Discount Corp. of New York.

Clients include General Dynamics, Eastman Kodak and Pacific Telesis.

Patricia de Blank Klink, president and director, is chief investment officer; Barbara D. Fiorito, vice president-marketing and administration, is client contact.

## Dixon Krogseth Ltd.

1066 W. Hastings St., Vancouver, British Columbia V6E 3X1; (604) 684-8541

| | |
|---|---|
| Total assets managed | $230,000,000 |
| Tax-exempt assets managed: | |
| Total | $203,000,000 |
| For subsidiaries of U.S. firms | $0 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 16 |
| Types of accounts managed | CU |
| No. of portfolio managers | 3 |

Dixon Krogseth Ltd., a Canadian firm, is an equity, fixed-income and balanced manager.

Its equity approach uses growth stock and sector rotation strategies, with about half of the stocks selected for sector weighting and half selected for individual growth characteristics.

Its fixed-income approach uses interest rate anticipation.

The firm follows 50 stocks closely and 100, generally; 10% of research is generated internally.

T. Alan Dixon is chief investment officer and client contact.

## Dodge & Cox

1 Post St., 35th Floor, San Francisco, Calif. 94104; (415) 981-1710

| | |
|---|---|
| Total assets managed | $4,931,000,000 |
| Tax-exempt assets managed | $3,960,000,000 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients | 91 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 8 |
| Size of research staff | 9 |

Dodge & Cox is an equity, fixed-income and balanced manager.

It takes a fundamental value, diversified approach to equities, investing in established companies managers believe have positive earnings prospects not reflected in current prices.

Its fixed-income approach focuses on identifying undervalued market sectors and securities to construct high-quality, diversified portfolios. Maturities are gradually adjusted within a range of nine to 15 years. Interest rate anticipation is used.

The asset mix Jan. 1 was 57% stocks, 40% bonds and 3% cash.

Joseph M. Fee, president and chief executive officer, is chief investment officer; Kenneth E. Olivier, vice president, is client contact.

## Dohmen Capital Management Inc.

73 Bishop St., Suite 1800, Honolulu, Hawaii 96813; (808) 524-8063 or (800) 992-9989

| | |
|---|---|
| Total assets managed | $40,000,000 |
| Tax-exempt assets managed | $24,000,000 |
| International assets managed | $10,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 60 |
| Types of accounts managed | CJ |
| No. of portfolio managers | 4 |
| Size of research staff | 2 |

Dohmen Capital Management Inc. is an equity, fixed-income, balanced and international manager.

Its equity approach is global and based on sector rotation and market timing/tactical asset allocation; it uses no-load mutual funds and government securities. Its fixed-income approach is based on interest rate anticipation and the liquidity posture of the Fed.

The parent company is Wellington Financial Corp.

Bert Dohmen, president, is chief investment officer; Rizalino R. Vicente, assistant to the president, is client contact.

## Dollins Symons Management Inc.

1409 Terrace Drive, Pittsburgh, Pa. 15228; (412) 344-3764

| | |
|---|---|
| Total assets managed | $5,000,000 |
| Tax-exempt assets managed | $4,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 12 |
| Types of accounts managed | CF |
| No. of portfolio managers | 2 |

Dollins Symons Management Inc. is an equity and balanced manager.

Its equity approach is quantitative, emphasizing low p/e stocks. Scientific analysis and interpretation of financial data is key, emphasizing analysis of historical financial data as a function of change in stock price.

Its fixed-income approach is passive, investing in high-quality obligations with average maturities of three years or less.

Clients include Iron & Glass Bank, Crossgates and Seal-Rite Door.

Charles C. Dollins, president, is chief investment officer; Edward L. Symons Jr., vice president, is client contact.

## Dominion Trust Co.

201 S. Jefferson St., Roanoke, Va. 24040; (703) 563-7773

| | |
|---|---|
| Total assets managed | $825,000,000 |
| Tax-exempt assets managed: | |
| Total | $350,000,000 |
| Commingled | $100,000,000 |
| Separate | $250,000,000 |
| International assets managed | $30,000,000 |
| Dedicated assets managed | $5,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients: | |
| Commingled | 95 |
| Separate | 290 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 6 |
| Size of research staff | 1 |

Dominion Trust Co. is an equity, fixed-income, balanced and GIC manager.

Its value-oriented equity approach emphasizes Graham & Dodd analysis and low p/e stocks. In fixed income, it uses interest rate anticipation and sector analysis in a value-oriented approach. Managers look for yield disparities among bond groups.

It uses options and fixed-income futures.

The parent company is Dominion Bancshares Corp.

Peter Dawyot, senior vice president, is chief investment officer; Peter Hartman and David Camper are client contacts.

## Carl Domino Associates L.P.

5 Harvard Circle, Suite 109, West Palm Beach, Fla. 33409; (407) 697-2723

| | |
|---|---|
| Total assets managed | $42,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $5,000,000 |
| No. of portfolio managers | 2 |

Carl Domino Associates L.P. is an equity, fixed-income and balanced manager.

Its equity approach uses fundamental analysis to identify undervalued, high-yield equities.

Its active fixed-income approach uses interest rate anticipation and sector analysis. Capital preservation is stressed.

The firm follows 200 stocks closely and 400 generally; 25% of the research is generated internally.

Carl J. Domino, president, is the chief investment officer; Thomas J. Walsh Jr., partner, is the client contact.

## Dougery, Jones & Wilder

2003 Landings Drive, Mountain View, Calif. 94043; (415) 968-4820

| | |
|---|---|
| Total assets managed | $86,000,000 |
| Tax-exempt assets managed | $86,000,000 |
| Tax-exempt clients | 32 |
| Types of accounts managed | CF |

Dougery, Jones & Wilder is a California limited partnership engaged in venture capital investing. It makes equity investments in small to medium-size companies.

All assets were in venture capital firms on Jan. 1.

Clients include Honeywell, John Deere and U S West.

Jeanne Mitchell, director of investor relations, is the client contact.

## Douglas, Noyes & Co. Inc.

50 Broad St., New York, N.Y. 10004; (212) 668-3044

| | |
|---|---|
| Total assets managed | $104,000,000 |
| Tax-exempt assets managed | $25,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 12 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 5 |

Douglas, Noyes & Co. Inc., an equity manager, makes heavy use of cash equivalents during periods of uncertainty. Commitments are based on projected total return and concentrated on companies with high visibility, above-average growth rates in earnings and dividends, a leadership position in the industry and positive price action relative to the market.

James A.M. Douglas, president is chief investment officer; Martha Kate Martin is client contact.

## Dreman Value Management

70 Pine St. Suite 4205, New York, N.Y. 10270; (212) 785-0202

| | |
|---|---|
| Total assets managed | $2,860,000,000 |
| Tax-exempt assets managed | $2,336,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 184 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 14 |
| Size of research staff | 1 |

Dreman Value Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach is to invest in undervalued low p/e stocks with high yields and solid fundamentals. The fixed-income approach uses interest rate anticipation and focuses on safety of principal and yield.

The asset mix Jan. 1 was 79% stocks, 9% bonds and 12% cash.

Clients include American Airlines, Colorado Fire & Police and Federal Express.

David N. Dreman is chief investment officer; Murat H. Davidson Jr. is client contact.

## Drexel Burnham Lambert Investment Advisors

3 Mellon Bank Center, 32nd Floor, Philadelphia, Pa. 19102-2468; (215) 963-3500

| | |
|---|---|
| Total assets managed | $2,866,000,000 |
| Tax-exempt assets managed | $1,625,000,000 |
| Real estate assets managed | $99,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 80 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 13 |

Drexel Burnham Lambert Investment Advisors is an equity, fixed-income and balanced manager.

Its disciplined equity approach concentrates portfolios in undervalued and out-of-favor securities based on relative p/e, yield and price to book.

Its fixed-income approach is active, taking advantage of credit and market inefficiencies and of cyclical and technical trends to add incremental value.

Options and fixed-income futures are used where appropriate and upon client request.

The asset mix Jan. 1 was 38% stocks, 43% bonds, 12% cash and 7% mortgage-backed securities.

The parent company is Drexel Burnham Lambert Inc.

Clients include Brooklyn Union Gas, Drexel University, Philadelphia Electric and Maryland National Capital Parks.

W. Thacher Brown, senior vice president, is chief investment officer; John Springrose, vice president, is client contact.

## Drexel Management Corp.

2 Broadway, 6th Floor, New York, N.Y. 10004; (212) 482-1352

| | |
|---|---|
| Total assets managed | $105,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $10,000,000 |
| No. of portfolio managers | 4 |
| Size of research staff | 4 |

Drexel Management Corp. is an equity and fixed-income manager.

Its equity approach focuses on emerging growth stocks. The fixed-income strategy uses interest rate anticipation. Options are used.

The parent company is Drexel Burnham Lambert Inc.

Bruce J. Trottier, senior vice president, is chief investment officer; David Gaston, vice president, is client contact.

## Dreyfus Management Inc.

767 Fifth Ave., New York, N.Y. 10153; (212) 715-6454

| | |
|---|---|
| Total assets managed | $1,633,000,000 |
| Tax-exempt assets managed | $1,550,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 40 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 6 |
| Size of research staff | 3 |

Dreyfus Management Inc. is an equity, fixed-income and balanced manager.

Its value-oriented, low p/e and contrarian equity approach blends top-down/bottom-up styles with stock selection and asset mix decisions being the most important, followed by industry or sector weighting.

Its fixed-income approach focuses on sector analysis. Average maturity coincides with peak of yield curve, but never exceeds 10 years. The firm's goal is to perform at least 300 basis points above the inflation rate with minimal risk.

The asset mix Jan. 1 was 25% stocks, 63% bonds and 12% cash.

The firm follows 30 to 50 stocks closely and 1,600, generally; 90% of

Denver Investment Advisors, Inc.

633 Seventeenth Street; Suite 1800
Post Office Box 17487
Denver, Colorado 80217

Dennis E. Larkin
Vice President
(303) 293-5588

Equity ■ Balanced ■ Fixed Portfolios

the research is generated internally.

The parent company is The Dreyfus Corp.

Clients include Mississippi Public Employees, National Telephone and Harris Corp.

Peter A. Santoriello, president, is the chief investment officer and client contact.

### Duff & Phelps Investment Management Co.

55 E. Monroe St., Chicago, Ill. 60603; (312) 368-5506

| | |
|---|---|
| Total assets managed | $5,674,000,000 |
| Tax-exempt assets managed | $5,474,000,000 |
| Real estate assets managed | $500,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 74 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 13 |
| Size of research staff | 110 |

Duff & Phelps Investment Management Co. is an equity, fixed-income, balanced and real estate manager.

Its equity approach employs bottom-up research emphasizing stocks with low p/e multiples, high-dividend income and above-average return on equity. Graham & Dodd analysis is used.

Its fixed-income approach stresses preservation of capital and generation of income using high quality issues. Maturity distribution is based on interest rate forecasts.

The asset mix Jan. 1 was 35% stocks, 50% bonds, 5% cash and 10% mortgage-backed securities.

The firm follows 125 stocks closely and 300, generally; 98% of the research is generated internally.

The parent company is Duff & Phelps Inc.

Clients include Arizona State Compensation Fund, Nevada Industrial Insurance System, Ohio State Highway Patrol and Lincoln Foundation.

Robert D. Milne is the chief investment officer; David A. Dahl is the client contact.

### Dundee Partners Inc.

Park 80 West — Plaza II, Saddle Brook, N.J., 07662; (201) 843-2250

| | |
|---|---|
| Total assets managed | $0 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $5,000,000 |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

Dundee Partners Inc., a new firm that started marketing its services in January 1987, is an equity manager.

Its equity approach uses sector rotation and quantitative methods. The firm rotates between sectors that research shows will benefit from recent major economic/political events, such as tax law changes or exchange rate moves.

The firm follows more than 350 stocks closely and 3,000, generally; 90% of the research is generated internally.

William Hay is the chief investment officer and client contact.

## E

### Eagle Asset Management

880 Carillon Parkway, St. Petersburg, Fla. 33716; 1-800-237-3101

| | |
|---|---|
| Total assets managed | $1,215,000,000 |
| Tax-exempt assets managed | $389,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 24 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 3 |
| Size of research staff | 3 |

Eagle Asset Management is an equity manager that mixes Graham & Dodd and quantitative techniques. The firm invests primarily in non-technology growth stocks with a significant value component.

The asset mix as of Jan. 1 was 85% stocks and 15% cash.

The firm follows 100 stocks closely and 200, generally; 25% of the research is generated internally.

The parent company is Raymond James Financial.

Clients include Louisiana Teachers, Florida, McKee Baking and City of Boston.

Herbert E. Ehlers is the chief investment officer; Lincoln Kinnicutt is the client contact.

### Eastdil Realty Inc.

40 W. 57th St., New York, N.Y. 10019; (212) 315-7200

| | |
|---|---|
| Total assets managed | $2,600,000,000 |
| Tax-exempt assets managed | $1,626,000,000 |
| Real estate assets managed | $1,626,000,000 |
| Minimum separate account | $100,000,000 |
| Tax-exempt clients | 9 |
| Types of accounts managed | CJG |

Eastdil Realty Inc., a real estate manager, focuses on innovative acquisition techniques and in-depth asset management. The objective is to achieve a competitive real rate of return over the long term through the enhancement of property value.

The asset mix Jan. 1 was 38% equity real estate and 62% mortgages.

Clients include AT&T, New York State Common Fund and Missouri State Employees.

Benjamin V. Lambert, chairman and chief executive officer, is chief investment officer; Jeffrey H. Cooper, Thomas M. Yamin and Robert T. Davis, executive vice presidents, are client contacts.

### Eaton Vance Management

24 Federal St., Boston, Mass. 02110; (617) 482-8260

| | |
|---|---|
| Total assets managed | $5,484,000,000 |
| Tax-exempt assets managed | $1,369,000,000 |
| 401(k)/457 assets managed | $200,000,000 |
| Real estate assets managed | $25,000,000 |
| International assets managed | $70,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 109 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 20 |
| Size of research staff | 14 |

Eaton Vance Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses sector rotation, focusing on growth and emerging growth stocks. The firm emphasizes financial fundamentals: quality, value, price and timeliness. Research focuses on revenue growth, improving margins, pricing flexibility, upward earnings momentum and enhanced price potential.

Its actively managed fixed-income approach seeks high, stable income and appreciation and downside protection. Selections are based on creditworthiness and yield, employing maturity changes, sector swaps and interest rate anticipation.

Options and fixed-income futures are used.

The asset mix Jan. 1 was 64% stocks, 18% bonds and 18% cash. As of the same date, the firm had $25 million in mortgage-backed securities, $65 million in foreign stocks and $5 million in foreign bonds.

The parent is Eaton Vance Corp.

James B. Hawkes is the chief investment officer; John H. Wise Jr., vice president, is the client contact.

### Edgewood Management Co.

675 Third Ave., New York, N.Y. 10017; (212) 687-7480

| | |
|---|---|
| Total assets managed | $380,000,000 |
| Tax-exempt assets managed | $20,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | CF |
| No. of portfolio managers | 5 |
| Size of research staff | 1 |

Edgewood Management Co. is an equity and balanced manager.

Its equity approach stresses growth stocks and its fixed-income approach uses interest rate anticipation and sector analysis.

The firm follows 50 stocks closely and 75 generally; 50% of the research is generated internally.

Clients include Roseburg Forest Products and Jay Yang Designs.

William C. Breed III, president, is the chief investment officer; Nicholas Stephens, managing director, is client contact.

### Dale K. Ehrhart Inc.

101 W. Venice Ave. Suite 11, Venice, Fla. 34285; (813) 485-8220

#### 25 largest managers of bond index funds

| Firm | $ millions |
|---|---|
| Wells Fargo | 10,989 |
| Mitchell Hutchins Inst'l | 7,446 |
| Mellon Bond | 5,825 |
| Mellon Capital | 2,900 |
| Bankers Trust | 2,494 |
| Lehman Mgmt. | 2,000 |
| State Street Bank | 1,960 |
| T. Rowe Price | 1,892 |
| Putnam Cos. | 1,622 |
| Lincoln Capital | 1,495 |
| Dimensional Fund Advisors | 974 |
| W.R. Lazard | 906 |
| Security Capital | 405 |
| American Nat'l/Chicago | 400 |
| Chase Investors | 378 |
| BEA Associates | 377 |
| Prudential Asset | 350 |
| Capstone Asset | 300 |
| Fiduciary Trust | 300 |
| Todd Investment | 210 |
| Nat'l Investment Services | 200 |
| Schroder Capital | 200 |
| Harris Trust | 196 |
| Boston Co. | 178 |
| Bear Stearns Asset | 160 |
| Total | 44,137 |

| | |
|---|---|
| Total assets managed | $34,000,000 |
| Tax-exempt assets managed | $12,000,000 |
| Minimum separate account | $75,000 |
| Tax-exempt clients | 92 |
| Types of accounts managed | C |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

Dale K. Ehrhart Inc., an equity manager, uses Graham & Dodd analysis and emphasizes top-quality, low p/e blue-chip securities. The firm writes covered calls to generate cash flow and to provide downside protection.

It follows 45 stocks closely and 110, generally; 30% of research is generated internally.

Dale K. Ehrhart is chief investment officer; Michael T. Hartley, senior vice president, is client contact.

### Eickhoff & Pieper Inc.

101 E. Kennedy Blvd. Suite 2460, Tampa, Fla. 33602; (813) 229-2180

| | |
|---|---|
| Total assets managed | $139,000,000 |
| Tax-exempt assets managed | $72,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 104 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 4 |
| Size of research staff | 1 |

Eickhoff & Pieper Inc. is an equity and balanced manager.

Its equity approach uses Graham & Dodd analysis and low p/e stocks; accelerated earnings and price momentum are emphasized.

Its fixed-income approach is defensive, providing stability and income consistency in balanced portfolios. The firm takes advantage of trends in interest rates while protecting capital value.

It follows 50 stocks closely and 100, generally; 15% of research is generated internally.

William A. Eickhoff is chief investment officer; Sharon Ackerman, director of client relations, is client contact.

### Elliott & Page Atlantic Ltd.

1801 Hollis St. Suite 300, Halifax, Nova Scotia B3J 3N4; (902) 423-9367

| | |
|---|---|
| Total assets managed | $125,000,000 |
| Tax-exempt assets managed: | |
| Total | $110,000,000 |
| For subsidiaries of U.S. firms | $0 |
| Non-North American assets | $2,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | CEGU |
| No. of portfolio managers | 2 |
| Size of research staff | 10 |

Elliott & Page Atlantic Ltd. is an equity, fixed-income and balanced manager.

Its bottom-up equity approach is value-oriented, using Graham & Dodd analysis and low p/es to identify growth/emerging growth stocks. Management ability and company financial strength are most important. Its fixed-income approach is passive, emphasizing the long-term secular forecast.

The parent company is Elliott & Page Ltd.

G. Peter Marshall, president, is chief investment officer; Robert G. McKim, portfolio manager, is client contact.

### Elliott & Page Investment Counsel

120 Adelaide St. W., Suite 1120, Toronto, Ontario M5H 1V1; (416) 365-8300

| | |
|---|---|
| Total assets managed | $3,500,000,000 |
| Tax-exempt assets managed: | |
| Total | $550,000,000 |
| For subsidiaries of U.S. firms | $30,000,000 |
| Real estate assets managed | $45,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 68 |
| U.S. subsidiaries | 2 |
| Types of accounts managed | CEFU |
| No. of portfolio managers | 17 |
| Size of research staff | 2 |

Elliott & Page Investment Counsel, a Canadian firm, is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented, with some sector rotation and emerging growth focus.

Its fixed-income approach uses interest rate anticipation and sector analysis. Issue quality and liquidity are emphasized.

The parent company is North American Life Assurance Co.

Brian Moore, president, is chief investment officer; Malvin C. Spooner, vice president and portfolio manager, is client contact.

### Richard Ellis Inc.

527 Madison Ave., New York, N.Y. 10022; (212) 355-4810

| | |
|---|---|
| Total assets managed | $3,240,000,000 |
| Tax-exempt assets managed | $2,165,000,000 |
| Real estate assets managed | $2,165,000,000 |
| Minimum separate account | $100,000,000 |
| Tax-exempt clients | 7 |
| Types of accounts managed | CG |
| No. of portfolio managers | 8 |
| Size of research staff | 18 |

Richard Ellis Inc., a real estate manager, stresses investments in fundamentally strong office buildings, regional malls and modern industrial properties. Generally, properties are in markets with sustainable economic growth.

All assets were in equity real estate Jan. 1.

Clients include New York State Common Fund, San Bernardino County Employees and Wisconsin.

Christopher D. Budden, president, is the chief investment officer; David R. Hodes, senior vice president, is the client contact.

### E.M.G. Advisors Inc.

57 Unquowa Rd., Fairfield, Conn. 06880; (203) 255-5701

| | |
|---|---|
| Total assets managed | $40,000,000 |
| Tax-exempt assets managed | $39,000,000 |
| Real estate assets managed | $32,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 6 |
| Types of accounts managed | CJ |
| No. of portfolio managers | 1 |

E.M.G. Advisors Inc. is a fixed-income manager that allocates assets between fixed- and variable-rate instruments as a function of the yield curve, trend and level of interest rates. Instruments are then selected that provide the best yield, credit values and liquidity.

Clients include Babcock Industries, IBEW Locals 570 & 518, Guthrie North America and Carlton Fields.

William H. Hatch III is the chief investment officer and client contact.

### EMP Capital Management

P.O. Box 1357, Richmond, Va. 23211; (800) 456-8585

| | |
|---|---|
| Total assets managed | $150,000,000 |
| Tax-exempt assets managed | $150,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 14 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 3 |
| Size of research staff | 1 |

EMP Capital Management is an equity and balanced manager.

Its equity approach identifies stocks with accelerating earnings momentum; buy disciplines and fundamental judgment are applied for final selections.

For fixed income, it constructs defensive portfolios for high quality and low volatility using a laddered structure and moderate shifts of maturity in the intermediate range.

The parent company is Wheat Investment Advisors Inc.

Lawrence B. Whitlock, senior vice president, is the chief investment officer; A. Gordon Goodykoontz, president, is the client contact.

### Roger Engemann & Associates Inc.

600 N. Rosemead Blvd., Pasadena, Calif. 91107-2101; (818) 351-9686

| | |
|---|---|
| Total assets managed | $360,000,000 |
| Tax-exempt assets managed | $216,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 320 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 4 |
| Size of research staff | 12 |

Roger Engemann & Associates Inc., an equity manager, focuses on growth and emerging growth stocks for investment. It uses cash and government securities to offset equity exposure, increasing cash equivalents as perceived market risk increases.

It follows 150 stocks closely and 500, generally; 60% of research is generated internally.

Clients include Birr Wilson and La Verne College.

Roger Engemann, president, is chief investment officer; Stephen Ascher, vice president, is client contact.

### Equitable Capital Management Corp.

1285 Avenue of the Americas, New York, N.Y. 10019; (212) 554-2000

| | |
|---|---|
| Total assets managed | $31,303,000,000 |
| Tax-exempt assets managed | $17,975,000,000 |
| 401(k)/457 assets managed | $600,000,000 |
| 401(k)/457 clients | 116 |
| International assets managed | $100,000,000 |
| Dedicated funds managed | $483,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 575 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 28 |
| Size of research staff | 26 |

Equitable Capital Management Corp. is an equity, fixed-income, balanced, international, convertibles, cash and leveraged buy-out fund manager.

Its equity approach integrates a growth orientation with a value discipline. Sector rotation is used.

It offers passive, high-yield and active fixed-income management. The active approach is based on interest rate anticipation and sector analysis. Portfolios are structured quantitatively.

Options and financial futures are used.

The asset mix Jan. 1 was 60% stocks, 14% bonds, 18% cash, 1% mortgage-backed securities and 7% private placements; $100 million was in foreign stocks.

The firm follows 500 stocks closely and 1,000, generally; 75% of research is generated internally.

The parent is Equitable Life Assurance Society of the United States.

Brian F. Wruble is chief investment officer; Zane Brown is client contact for fixed income and Alden Stewart, for equity and balanced accounts.

### Equitable Real Estate Investment Management

787 Seventh Ave., 46th Floor, New York, N.Y. 10019; (212) 554-4213

| | |
|---|---|
| Total assets managed | $32,857,000,000 |
| Tax-exempt assets managed | $16,906,000,000 |
| Real estate assets managed | $16,906,000,000 |
| Minimum separate account | $100,000,000 |
| Tax-exempt clients | 258 |
| Types of accounts managed | CGJ |
| No. of portfolio managers | 9 |

Equitable Real Estate Investment Management Inc. acquires ownership and debt positions in diversified, quality, well-located properties with the potential growth of rental income and value appreciation.

The asset mix Jan. 1 was 70% equity real estate and 30% mortgages; $1.269 billion was in hybrid debt.

The parent company is Equitable Life Assurance Society of the United States.

Clients include Exxon, State of Florida and North American Phillips.

George R. Puskar, president and chief operating officer, is chief invest-

ment officer; Paul J. Dolinoy, executive vice president, is client contact.

### Equitec Institutional Realty Advisers Inc.

7677 Oakport St., Oakland, Calif. 94614; (415) 430-9900

| | |
|---|---|
| Total assets managed | $1,800,000,000 |
| Tax-exempt assets managed | $200,000,000 |
| Real estate assets managed | $200,000,000 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients | 27 |
| Types of accounts managed | CG |

Equitec Institutional Realty Advisers Inc. acquires and aggressively manages high-quality, income-producing commercial property. Properties are liquidated within three to seven years, primarily on an all-cash basis.

The parent company is PacifiCorp.

Clients include San Diego County, Conrail, K mart and Hughes.

Masden S. Cason, chairman and chief executive officer, is the chief investment officer; Don Jackson, senior vice president, is the client contact.

### Equity Investment Corp.

2900 Paces Ferry Road, Suite C-100, Atlanta, Ga. 30339; (404) 431-9735

| | |
|---|---|
| Total assets managed | $3,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $150,000 |
| No. of portfolio managers | 1 |

Equity Investment Corp. follows a strict investment discipline using a computerized valuation methodology based on principles espoused by W. Buffett. This methodology leads to the ownership of companies with high returns on equity, high growth, low debt and low p/e ratios.

The firm follows 50 stocks closely and 3,500 generally; all research is generated internally.

James F. Barksdale, president, is chief investment officer and client contact.

### Essex Investment Management Inc.

10 Post Office Square, Boston, Mass. 02109; (617) 482-4870

| | |
|---|---|
| Total assets managed | $1,226,000,000 |
| Tax-exempt assets managed | $833,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 70 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 5 |
| Size of research staff | 8 |

Essex Investment Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach emphasizes small-cap growth stocks; in fixed-income, its approach is moderate market timing.

The asset mix Jan. 1 was 81% stocks, 9% bonds and 10% cash.

The firm produces 80% of its research internally.

Joseph C. McNay, president, is chief investment officer; Daniel C. Horan, vice president, is client contact.

### Estabrook Capital Management

430 Park Ave., New York, N.Y. 10022; (212) 319-4343

| | |
|---|---|
| Total assets managed | $750,000,000 |
| Tax-exempt assets managed | $500,000,000 |
| 401(k)/457 assets managed | $18,000,000 |
| 401(k)/457 clients | 7 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 190 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 8 |

Estabrook Capital Management is an equity, fixed-income, balanced and convertible manager.

Its value approach to equities stresses selection based on projections of total return over a stock market cycle. Emphasis is on potential growth in earnings and dividends, underlying asset worth and fundamental value.

Its fixed-income approach uses interest rate anticipation, limiting investments to government and government-guaranteed issues and to corporates and municipals rated A or higher.

The asset mix Jan. 1 was 60% stocks, 30% bonds and 10% cash.

Clients include Curtis Wright, TWA Machinists and South Carolina E&G.

Charles T. Foley, president, is the chief investment officer; William C. Petty III is the client contact.

### European & Pacific Investment Management

620-1100 Melville St., Vancouver, British Columbia V6E 4A6; (604) 687-7306

| | |
|---|---|
| Total assets managed | $247,000,000 |
| Tax-exempt assets managed: | |
| Total | $247,000,000 |
| For subsidiaries of U.S. firms | $0 |
| Non-North American assets | $202,000,000 |
| Minimum separate account | $8,000,000 |
| Tax-exempt clients | 70 |
| Types of accounts managed | CEFGU |
| No. of portfolio managers | 3 |

European & Pacific Investment Management, a Canadian firm, is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented, using low p/e stocks and Graham & Dodd analysis combined with sector rotation and market timing/tactical asset allocation. Its fixed-income approach uses interest rate anticipation and sector analysis.

The parent company is AMI Asset Management International Inc.

Frank H. Brouwer, president, is chief investment officer; Leonard A. McFarland, vice president, is client contact.

### Evans & Moxon Capital Management Inc.

19 S. Main St., Yardley, Pa. 19067; (215) 493-0500

| | |
|---|---|
| Total assets managed | $240,000,000 |
| Tax-exempt assets managed | $216,000,000 |
| Real estate assets managed | $6,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 19 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Evans & Moxon Capital Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach emphasizes midsize-growth companies ($100 million to $1.5 billion) within industries experiencing above-average growth.

In fixed income, the firm uses yield curve and yield spread analysis to try to outperform the market by 2% to 3% annually.

John S. Moxon, president, is the chief investment officer and client contact.

### Excalibur Management

125 Pearl St., Boston, Mass. 02110; (617) 451-6707

| | |
|---|---|
| Total assets managed | $234,000,000 |
| Tax-exempt assets managed | $77,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 27 |
| Types of accounts managed | CEG |
| No. of portfolio managers | 6 |

Excalibur Management is a balanced manager.

A top-down monetary/economic analysis guides the asset allocation among stocks, bonds and cash equivalents. Appropriate sectors and stock selection follow, focusing on growth and emerging growth stocks.

Its fixed-income approach is based on interest rate anticipation, with investments focused on the most attractive area of the yield curve relative to rate trends.

The firm follows 100 stocks closely; 50% of research is done internally.

Michael A. Delduchetto is chief investment officer; John K. Beeten is client contact.

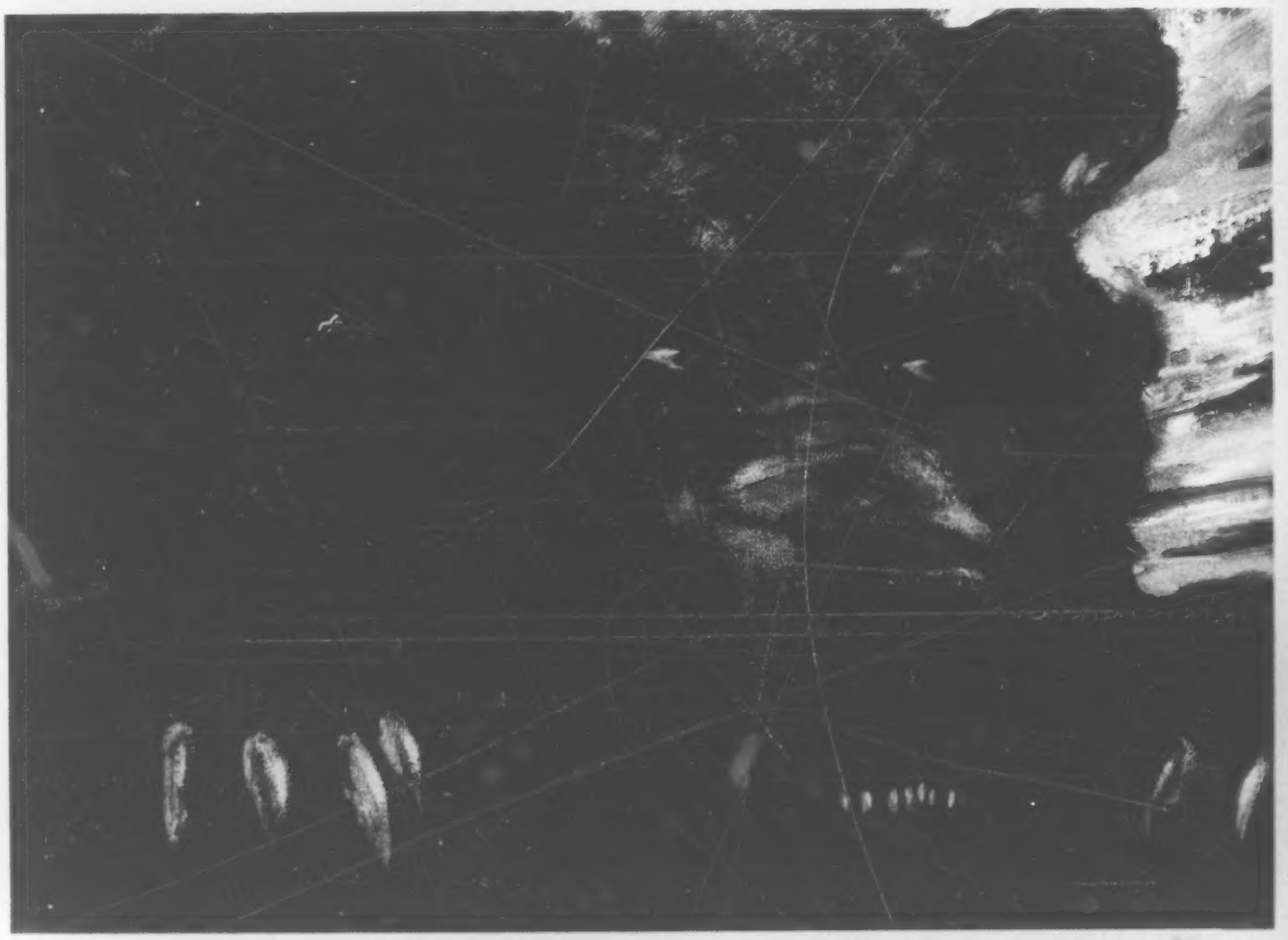
F

### Farmer & Lang Inc.

8735 Dunwoody Place, Suite 1, Atlanta, Ga. 30350; (404) 993-4181

| | |
|---|---|
| Total assets managed | $175,000,000 |
| Tax-exempt assets managed | $120,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 304 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Farmer & Lang Inc. is an equity,



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fixed-income and balanced manager.

Its equity approach emphasizes Graham & Dodd analysis, low p/e stocks and market timing. Its fixed-income approach uses laddered short-term maturities. Options are used.

The firm follows 80 stocks closely and 1,000, generally; all research is generated internally.

Robert B. Lang, president, is chief investment officer; Harry W. Farmer, chairman, the client contact.

### FASCO

1660 Walt Whitman Road, Melville, N.Y. 11747; (516) 293-3666

| | |
|---|---|
| Total assets managed | $31,000,000 |
| Tax-exempt assets managed | $20,000,000 |
| Minimum separate account | $25,000 |
| Tax-exempt clients | 150 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

FASCO, an equity and balanced manager, follows an asset allocation approach using no-load mutual funds.

The parent company is F.A. Spina & Co. Inc.

Alan J. Levinsohn, president, is chief investment officer and client contact.

### Favia, Hill & Associates Inc.

30 Rockefeller Plaza, 59th Floor, New York, N.Y. 10112; (212) 621-2928

See entry for THE CHEMICAL INVESTMENT GROUP.

### Federated Investment Counseling Inc.

Federated Investors Tower, Pittsburgh, Pa. 15222-3779; (412) 288-6588

| | |
|---|---|
| Total assets managed | $534,000,000 |
| Tax-exempt assets managed | $505,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 31 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 5 |
| Size of research staff | 4 |

Federated Investment Counseling Inc. is an equity, fixed-income and balanced manager.

Its equity approach is quantitative and value-oriented, concentrating in large-cap, high-quality stocks with a moderate asset allocation decision.

Using interest rate anticipation, its fixed-income accounts are managed on duration with a current range between three and seven years.

The asset mix Jan. 1 was 41% stocks, 49% bonds and 10% cash.

The firm follows 100 stocks closely and 1,000, generally; 70% of research is generated internally.

The parent company is Aetna Life & Casualty Co.

Clients include Titanium Metals, IC Industries and Rockwell International.

Henry J. Gailliot, president, is chief investment officer; James H. O'Leary, vice president, is client contact.

### Ferguson & Wellman Inc.

1001 S.W. Fifth Ave. Suite 1919, Portland, Ore. 97204; (503) 226-1444

| | |
|---|---|
| Total assets managed | $595,000,000 |
| Tax-exempt assets managed | $510,000,000 |
| Real estate assets managed | $5,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 120 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 6 |
| Size of research staff | 1 |

Ferguson & Wellman Inc. is an equity, fixed-income and balanced manager.

The firm's equity approach is disciplined, using Graham & Dodd principals, low p/e stocks and sector rotation. Value is emphasized, focusing on companies with a potential for earnings growth and dividend increases.

Its fixed-income approach uses interest rate anticipation and sector analysis, with portfolios structured to emphasize maturities, relative value between sectors and quality levels.

The asset mix Jan. 1 was 35% stocks, 55% bonds, 9% cash and 1% equity real estate.

Clients include Oregon & Washington Carpenters and HealthLink.

H. Joseph Ferguson and Norbert J. Wellman are the chief investment officers; James H. Rudd, executive vice president, is the client contact.

### Ferris Investment Advisors

1720 Eye St. N.W., Washington, D.C. 20006; (202) 429-3508

| | |
|---|---|
| Total assets managed | $180,000,000 |
| Tax-exempt assets managed | $65,000,000 |
| Minimum separate account | $300,000 |
| Tax-exempt clients | 54 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 5 |
| Size of research staff | 3 |

Ferris Investment Advisors is an equity, fixed-income and balanced manager.

Its equity approach focuses on low p/e stocks. Its fixed-income approach is passive, investing to boost income and reduce risk in equity portfolios.

The firm follows 50 stocks closely and 125, generally; 50% of research is generated internally.

The parent is Ferris & Co. Inc.

Clients include Sibley Memorial Hospital, Medlantic Healthcare Group and Holton Arms School.

George M. Ferris Jr. is the chief investment officer; Anthony J. Sulvetta, managing director-investment advisory, is the client contact.

### F.I.A. Associates

1601 Response Road Suite 300, Sacramento, Calif. 95815; (916) 920-4051

| | |
|---|---|
| Total assets managed | $1,828,000,000 |
| Tax-exempt assets managed | $1,828,000,000 |
| Real estate assets managed | $1,481,000,000 |
| Minimum separate account | $50,000,000 |
| Tax-exempt clients | 7 |
| Types of accounts managed | G |

F.I.A. Associates, a real estate manager, takes a conservative approach favoring up-and-going properties and emphasizing return on investment; appreciation is secondary. Values are enhanced through intensive asset management.

The asset mix Jan. 1 was 52% equity real estate, 30% mortgages, 16% debt/equity and 2% leveraged purchase.

The parent company is MeraBank.

Clients include California Public Employees, Texas Teachers, Utah State Retirement and Illinois Teachers.

Stephen A. Rosenthal is chief investment officer; James L. Sublett is client contact.

### Fidelity Bank

135 S. Broad St., Philadelphia, Pa. 19109; (215) 985-6000

| | |
|---|---|
| Total assets managed | $4,803,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,732,000,000 |
| Commingled | $218,000,000 |
| Separate | $1,514,000,000 |
| Real estate assets managed | $60,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 1,073 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 9 |
| Size of research staff | 10 |

Fidelity Bank is an equity, fixed-income and balanced manager.

Discipline is the overriding principle of the banks' equity funds. Disciplines concerning economic indicators, fundamental growth and market valuation determine stock selection and cash positions. Options are used.

Its fixed-income approach features active, aggressive management using strict economic disciplines in determining when to adjust maturity structure and duration.

Latimer & Buck, a wholly owned subsidiary, manages $1.25 billion in real estate assets.

The asset mix Jan. 1 was 41% stocks, 41% bonds, 17% cash and 1% mortgages.

The bank follows 120 stocks closely and 6,500, generally; 75% of research is generated internally.

Clients include Pennsylvania Municipal, IBEW Local 98, Westmoreland Coal and Rosenberg Foundation.

The parent is Fidelcor Inc.

Edward T. Koch, senior vice president, is chief investment officer; Herbert G. Miller, vice president, is client contact.

### Fidelity International Investment Advisors Ltd.

111 Devonshire St., Boston, Mass. 02109; (617) 570-6330

| | |
|---|---|
| Total assets managed | $2,500,000,000 |
| Tax-exempt assets managed | $1,800,000,000 |
| International assets managed | $1,600,000,000 |
| Minimum separate account | $20,000,000 |
| Types of accounts managed | CFG |
| No. of portfolio managers | 16 |
| Size of research staff | 23 |

Fidelity International Investment Advisors Ltd., an international equity manager, takes a value-oriented approach, emphasizing local market conditions.

The asset mix Jan. 1 was 88% stocks, 6% bonds and 6% cash.

The firm follows 1,000 stocks closely; 75% of the research is generated internally.

The parent company is Fidelity International Ltd.

Clients include GM, GTE, PacTel and Southwestern Bell.

James E. Tonner, president, is chief investment officer; William B. Fink, senior vice president, is client contact.

### Fidelity Management & Research Co.

82 Devonshire St., Boston, Mass. 02109; (617) 570-5692

| | |
|---|---|
| Total assets managed | $75,000,000,000 |
| Tax-exempt assets managed | $6,000,000,000 |
| 401(k)/457 assets managed | $2,800,000,000 |
| 401(k)/457 clients | 1,200 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 5 |
| Size of research staff | 81 |

Fidelity Management & Research Co. is an equity, fixed-income, international and GIC manager.

The asset mix Jan. 1 was 55% stocks, 25% bonds, 10% cash and 10% GICs.

J. Gary Burkhead, president, is chief investment officer; James V. Bowhers, senior vice president, is client contact.

### Fidelity Management Trust

82 Devonshire St., Boston, Mass. 02109; (617) 570-6982

| | |
|---|---|
| Total assets managed | $5,464,000,000 |
| Tax-exempt assets managed | $5,206,000,000 |
| International assets managed | $51,000,000 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 85 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 22 |
| Size of research staff | 81 |

Fidelity Management Trust Co. is an equity, fixed-income, balanced and international manager.

Its equity approach is value-oriented, focusing on stock yield. It offers four equity disciplines: income-managed equity, earnings growth, small company growth and overseas equity.

Its three fixed-income approaches are high-yield bond, structured and an actively managed quantitative discipline. Fixed-income futures are used.

The asset mix Jan. 1 was 79% stocks, 16% bonds and 5% cash. As of the same date, the firm had $51 million in foreign stocks.

The firm generates 80% of its research internally.

The parent company is FMR Corp.

Clients include Ford, Eastman Kodak, Illinois Municipal and GM.

Frank T. Parrish and Richard T. O'Rourke, executive vice presidents, are chief investment officers; Robert L. Reynolds, senior vice president, is client contact.

### Fiduciary Counsel Inc.

40 Wall St., New York, N.Y. 10005; (212) 344-6400

| | |
|---|---|
| Total assets managed | $324,000,000 |
| Tax-exempt assets managed | $31,000,000 |
| Minimum separate account | $400,000 |
| Tax-exempt clients | 30 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 6 |
| Size of research staff | 5 |

Fiduciary Counsel Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses Graham & Dodd principles, sector rotation and market timing to invest in growth or emerging growth stocks with a lower than average p/e. Its fixed income approach is passive.

Options are used.

The firm follows 100 stocks closely; all research is generated internally.

The parent company is Associated Family Services Inc.

Andrew E. Beer is the chief investment officer; Jack R. Orben is the client contact.

### Fiduciary Management Associates

55 W. Monroe St. Suite 2550, Chicago, Ill. 60610; (312) 930-6850

| | |
|---|---|
| Total assets managed | $583,000,000 |
| Tax-exempt assets managed | $511,000,000 |
| Real estate assets managed | $12,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 86 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 6 |
| Size of research staff | 2 |

Fiduciary Management Associates is an equity, fixed-income, balanced and real estate manager.

Emphasizing growth and low p/e stocks and sector rotation, it is a top-down, macroeconomic equity manager, investing in well-managed, value-oriented companies.

Basing its fixed-income approach on interest rate anticipation and sector anaiysis, it uses active, top-down management, varying sector exposure and taking advantage of interest rate changes and yield spread variations.

The firm also offers a closed-end real estate fund.

The asset mix Jan. 1 was 57% stocks, 30% bonds and 13% cash; $12 million was in mortgage-backed securities.

The parent is United Asset Management.

Philip E. Arnold, president, is chief investment officer; Robert F. Carr III, chairman, is the client contact.

### Fiduciary Management Inc. of Milwaukee

222 E. Mason, Milwaukee, Wis. 53202; (414) 271-8008

| | |
|---|---|
| Total assets managed | $397,000,000 |
| Tax-exempt assets managed | $324,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 97 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

Fiduciary Management Inc. of Milwaukee is an equity, fixed-income, balanced, mutual fund and commingled funds manager.

The firms' stock selection process is based on the fundamentally driven value concept. It attempts to buy growth companies or assets at bargain prices reflected in low relative price-to-earnings ratios or at least a low relative price-to-book.

Its fixed-income approach uses interest rate anticipation, emphasizing preservation of capital and investment results 300 basis points over T-bills. Only government issues are bought with maturities not exceeding 10 years.

The firm generates 75% of the research internally.

Ted D. Kellner is the chief investment officer; Gary G. Wagner is the client contact.

### Fiduciary Trust Co. International

2 World Trade Center, New York, N.Y. 10048; (212) 466—4100

| | |
|---|---|
| Total assets managed | $15,539,000,000 |
| Tax-exempt assets managed: | |
| Total | $12,744,000,000 |
| Commingled | $19,000,000 |
| Separate | $12,725,000,000 |
| 401(k)/457 assets managed | $93,000,000 |
| 401(k)/457 clients | 4 |
| Real estate assets managed | $1,245,000,000 |
| International assets managed | $4,554,000,000 |
| Indexed assets managed | $300,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients: | |
| Commingled | 5 |
| Separate | 191 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 41 |
| Size of research staff | 13 |

Fiduciary Trust Co. International is an equity, fixed-income, balanced, real estate and international manager.

Its equity approach is theme-oriented, using worldwide economic analysis to structure portfolios, a top-down approach to determine industry weightings and bottom-up research.

Its fixed-income approach uses sector rotation with intermediate-term, high-quality issues.

The asset mix Jan. 1 was 31% stocks, 44% bonds, 15% cash, 6% equity real estate and 4% mortgage-backed securities; $1.95 billion was in foreign stocks, $1.924 billion in foreign bonds, $680 million in foreign cash and $300 in bond indexed funds.

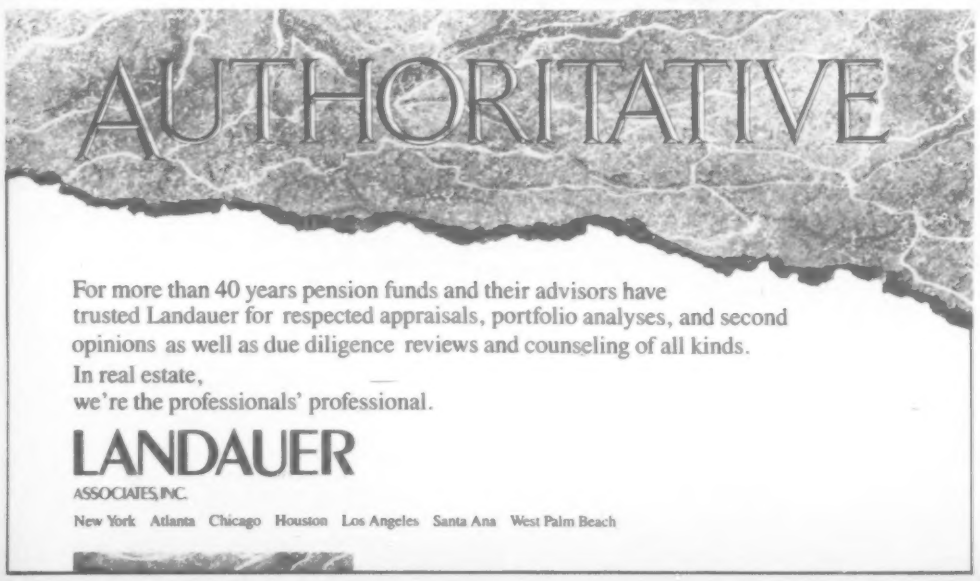
Clients include American Red Cross, Smithsonian and Arizona.

Jeremy H. Biggs is chief investment officer; George J. Mullen Jr., senior vice president, is client contact.

### The Fifth Third Bank

38 Fountain Square Plaza, Cincinnati, Ohio 45263; (513) 579-4314

| | |
|---|---|
| Total assets managed | $3,211,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,483,000,000 |
| Commingled | $296,000,000 |



| | |
|---|---|
| Separate | $1,187,000,000 |
| 401(k)/457 assets managed | $19,000,000 |
| 401(k)/457 clients | 101 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Separate | 820 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 13 |

The Fifth Third Bank is an equity, fixed-income, balanced, convertible and GIC manager.

Its equity approach is bottom-up and value-oriented, emphasizing low p/e stocks. Its fixed-income approach is to minimize total portfolio volatility. Portfolios consist of about 60% Treasury/agency securities with maturities of five to seven years, a minimum quality of A and a weighted average quality of AA.

The asset mix Jan. 1 was 60% stocks, 30% bonds and 10% cash.

The bank follows 50 stocks closely and 250, generally; 30% of research is generated internally.

Clients include Sisters of Mercy-Cincinnati, Cincinnati Gas & Electric, Kroger and Taft Broadcasting.

The parent is Fifth Third Bancorp.

P. Michael Brumm, senior vice president and treasurer, is chief investment officer; Timothy J. Lysaght, senior trust officer, is client contact.

## Financial Aims Corp.

P.O. Box 9078, Great Falls, Mont. 59403; (406) 727-6111

| | |
|---|---|
| Total assets managed | $100,000,000 |
| Tax-exempt assets managed | $40,000,000 |
| Dedicated funds managed | $7,000,000 |
| Minimum separate account | $200,000 |
| Tax-exempt clients | 73 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

Financial Aims Corp. is an equity, fixed-income and balanced manager.

Its equity approach uses macro- and microanalysis. The macro analysis relies on macroeconomic and some quantitative measurements; the micro approach is value determinant, relying on price-earnings and price-sales confirmation in addition to Z-score.

Its fixed-income approach varies maturities in relation to economic outlook and interest rate forecasts.

The parent is DADCO Inc.

Wm. S. Macfadden Jr., president, is chief investment officer and client contact.

## First Asset Management

First Bank Place East, Minneapolis, Minn. 55480; (612) 370-4479

| | |
|---|---|
| Total assets managed | $2,971,000,000 |
| Tax-exempt assets managed: | |
| Total | $2,967,000,000 |
| Commingled | $1,411,000,000 |
| Separate | $1,556,000,000 |
| Real estate assets managed | $79,000,000 |
| Indexed assets managed | $19,000,000 |
| Dedicated assets managed | $150 000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients: | |
| Commingled | 20 |
| Separate | 92 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 8 |
| Size of research staff | 7 |

First Asset Management is primarily a balanced manager with separate equity, fixed-income and real estate management available.

Its equity approach uses sector rotation with a value bias. Selection of industries and securities is based on its economic forecast, a return-on-equity model and a fair value model.

Its fixed-income strategy centers around fundamental interest rate forecasting within a framework for measuring and controlling both systematic and specific risk in the portfolio. Dedication/immunization strategies are used.

Its real estate approach is to select properties whose values can be enhanced through aggressive management and additional capital.

The asset mix Jan. 1 was 25% stocks, 34.2% bonds, 35% cash, 2.3% equity real estate and 3.5% GICs and oil/gas; $8 million was in mortgages and $19 million in equity index funds.

The parent is First Bank System.

John M. Murphy Jr. is chief investment officer; Kevin S. Underkofler is client contact.

## First Bank Milwaukee

201 W. Wisconsin Ave., Milwaukee, Wis. 53259; (414) 227-5839

| | |
|---|---|
| Total assets managed | $271,000,000 |
| Tax-exempt assets managed: | |
| Total | $159,000,000 |
| Commingled | $35,000,000 |
| Separate | $124,000,000 |
| Real estate assets managed | $40,000,000 |
| Minimum separate account | $150,000 |
| Tax-exempt clients: | |
| Commingled | 150 |
| Separate | 25 |
| Types of accounts managed | CFJ |
| No. of portfolio managers | 3 |

First Bank Milwaukee is an equity, fixed-income and balanced manager.

Its equity and fixed-income approaches are eclectic, using the best elements of a wide range of styles as economic conditions warrant.

The firm follows 60 stocks closely and 150, generally.

The parent company is First Bank System.

Richard R. Jandrain is chief investment officer; Merl B. Case, vice president-marketing, is client contact.

Leading international investment advisers: June 27.

## First Boston Asset Management

12 E. 49th St., New York, N.Y. 10017; (212) 909-4525

| | |
|---|---|
| Total assets managed | $3,029,000,000 |
| Tax-exempt assets managed | $390,000,000 |
| Real estate assets managed | $200,000,000 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 6 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 7 |
| Size of research staff | 5 |

First Boston Asset Management is an equity, fixed-income, balanced and international manager.

Its active equity approach uses quantitative technologies to identify value, focusing on revenue growth and earnings momentum.

The fixed-income approach, also quantitative and active, uses intensive research of high-yield bonds.

The parent is First Boston Corp.

Michael F. Holland is chief investment officer; Peter M. Lebovitz is client contact.

## First Chicago Investment Advisors

3 First National Plaza, Chicago, Ill. 60670; (312) 732-6474

| | |
|---|---|
| Total assets managed | $9,567,000,000 |
| Tax-exempt assets managed | $9,245,000,000 |
| 401(k)/457 assets managed | $98,000,000 |
| 401(k)/457 clients | 17 |
| Real estate assets managed | $888,000,000 |
| International assets managed | $2,310,000,000 |
| Index funds managed | $82,000,000 |
| Dedicated funds managed | $255,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 226 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 10 |
| Size of research staff | 56 |

First Chicago Investment Advisors is an equity, fixed-income, balanced, real estate, international, venture capital and multiple asset class manager.

Its equity approach is value-oriented, based on fundamental research. It identifies mispriced securities in shifting market environments, selecting stocks within the context of disciplined judgments on market timing, sector exposures and industry.

For fixed-income, a portfolio's interest rate, yield curve, quality/sector and issue-specific exposures are managed to outperform a selected benchmark during an interest rate cycle.

Its real estate approach focuses on building core portfolios of general-purpose properties in proven markets diversified by type and region.

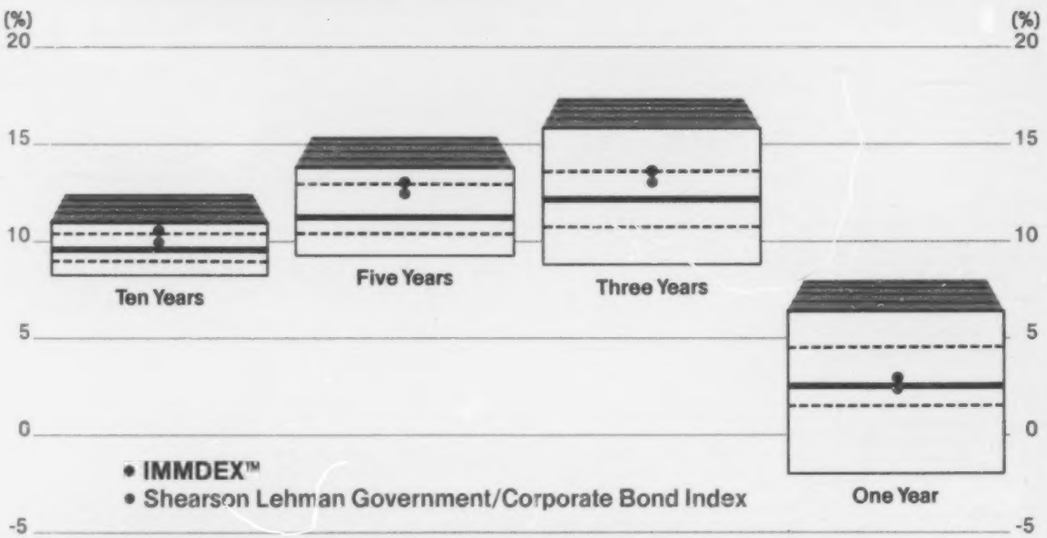
The asset mix Jan. 1 was 25% stocks, 46% bonds, 17% cash, 10% equity real estate and 2% venture capital; $638 million was in foreign stocks, $1.67 billion in foreign bonds and $82 million in equity indexed funds. The above figures include $306 million invested in its multi-asset portfolio.

The parent company is First Chicago Corp.

Gary P. Brinson is president and chief investment officer; Diana M. Cohen, assistant vice president, is client contact.

Public funds will be highlighted Nov. 28.


# Bond Indexation with the IMMDEX™ advantage.




**Bond fund total rates of return for periods ended December 31, 1987. Source SEI.**

**The Shearson Lehman Government/Corporate Bond Index has provided superior performance when compared to active fixed income managers. The Index has consistently provided first or strong second quartile returns over most time periods.**

**Immdex is a unique bond management system in which the annual return will match or exceed the index rate of return. On the basis of actual experience, IMMDEX has added an average of 65 basis points of excess annual return to the Shearson Lehman Government/Corporate Bond Index.**

**Immdex accomplishes this objective through two strategies:**

- **The index rate of return is achieved through a proprietary duration-matching strategy.**
- **Immdex capitalizes on market opportunities to further enhance total return.**

**First Wisconsin Trust Company is a leader in the area of quantitative fixed income management and we believe that the Immdex advantage will prove to be an attractive alternative to your current bond management approach.**

**Let us review how Immdex provides positive tracking to the Shearson Lehman Government/Corporate Bond Index and enhanced market returns through the use of bond management techniques. Call Robert Aubrecht at (414) 765-4906 or Charles Groeschell at (414) 765-4789 or write First Wisconsin Trust Company, First Wisconsin Center, Box 2054, Milwaukee, Wisconsin 53201.**

FIRST WISCONSIN TRUST COMPANY

## First City Bank of Dallas, Trust Division

First City Center P.O. Box 661700, Dallas, Texas 75266-1700; (214) 939-8401

| | |
|---|---|
| Total assets managed | $149,000,000 |
| Tax-exempt assets managed: | |
| Total | $80,000,000 |
| Commingled | $39,000,000 |
| Separate | $41,000,000 |
| Real estate assets managed | $9,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients: | |
| Commingled | 60 |
| Separate | 15 |
| Types of accounts managed | CFJG |
| No. of portfolio managers | 2 |

First City Bank of Dallas, Trust Division, is an equity, fixed-income and balanced manager.

Its equity approach uses fundamental security analysis, value relationships, timing and flexibility.

Its fixed-income approach is an intermediate core system. Fundamental economic analysis and timing help achieve high current return.

The parent company is First City Bancorporation of Texas.

Dale Crues is the chief investment officer; Keith Griffitts is the client contact.

## First Fidelity Bank

765 Broad, Newark, N.J. 07101; (201) 430-4000

| | |
|---|---|
| Total assets managed | $5,620,000,000 |
| Tax-exempt assets managed: | |
| Total | $3,100,000,000 |
| Commingled | $1,700,000,000 |
| Separate | $1,400,000,000 |
| 401(k)/457 assets managed | $300,000,000 |
| 401(k)/457 clients | 100 |
| International assets managed | $10,000,000 |
| Indexed assets managed | $23,000,000 |
| Tax-exempt clients: | |
| Commingled | 582 |
| Separate | 95 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 10 |
| Size of research staff | 8 |

First Fidelity Bank is an equity, fixed-income, balanced and international/global manager.

Its equity approach follows Graham & Dodd principles. It seeks undervalued stocks with higher expected earnings growth than the S&P 500 but with lower p/e ratios. Its fixed-income approach is active, using interest rate anticipation to capture gains while minimizing risk.

The asset mix Jan. 1 was 35% stocks, 55% bonds and 10% cash; $10 million was in foreign stocks and $23 million in equity index funds.

The bank follows 75 to 80 stocks closely and 150, generally; 80% of research is generated internally.

Clients include Warner-Lambert, Foster Wheeler, New Jersey Transit and Teamsters.

The parent company is First Fidelity Bancorporation.

Richard Nicholson, senior vice president, is chief investment officer; Michael B. Watson, senior vice president-marketing, is client contact.

## First Interstate Bank of Arizona

100 W. Washington, Phoenix, Ariz. 85003; (602) 271-1585

| | |
|---|---|
| Total assets managed | $2,200,000,000 |
| Tax-exempt assets managed: | |
| Total | $270,000,000 |
| Commingled | $93,000,000 |
| Separate | $177,000,000 |
| Real estate assets managed | $14,000,000 |
| Minimum separate account | $300,000 |
| Tax-exempt clients: | |
| Commingled | 260 |
| Separate | 174 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 13 |

First Interstate Bank of Arizona is an equity, fixed-income, balanced and real estate manager.

Its equity approach is to buy stocks, at reasonable prices, of companies with a consistent record of above-average increases in earnings and dividends. Its fixed-income approach emphasizes construction of a high-quality, conservative portfolio that produces a predictable income stream and low portfolio turnover.

Its real estate approach focuses on management of individual properties.

The parent company is First Interstate Bancorp.

Clients include Tucson Medical Center and Sun Health.

Robert L. Mueller, senior vice president, is chief investment officer; Richard A. Malcolmson, vice president, is client contact.

## First Interstate Bank of California

707 Wilshire Blvd., Los Angeles, Calif. 90017; (213) 614-3210

| | |
|---|---|
| Total assets managed | $1,016,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,316,000,000 |
| Commingled | $966,000,000 |
| Separate | $50,000,000 |
| 401(k)/457 assets managed | $50,000,000 |
| 401(k)/457 clients | 274 |
| International assets managed | $18,000,000 |
| Indexed assets managed | $228,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients: | |
| Commingled | 117 |
| Separate | 15 |
| Types of accounts managed | CFGJ |
| No. of portfolio managers | 5 |
| Size of research staff | 14 |

First Interstate Bank of California is an equity, fixed-income and balanced manager.

Its equity and fixed-income approaches are passive. Stocks follow the S&P 500 index. Long-term fixed-income goals are to produce real rates of return that exceed the Salomon Brothers BIG index.

Its real estate approach emphasizes geographic diversity, with concentration on areas offering strong growth potential and stable economic bases.

The asset mix Jan. 1 was 29% stocks, 20% bonds, 47% cash and 4% equity real estate. As of the same date, it had $18 million in foreign stocks, $175 million in equity index funds and $53 million in bond index funds.

The parent company is First Interstate Bancorp.

Vern Kozlen, senior vice president, is chief investment officer; Peter C. Gerrer is client contact.

## First Interstate Bank of Casper

P.O. Box 40, Casper, Wyo. 82602; (307) 235-4362

| | |
|---|---|
| Total assets managed | $79,000,000 |
| Tax-exempt assets managed: | |
| Total | $26,000,000 |
| Commingled | $10,000,000 |
| Separate | $16,000,000 |
| Real estate assets managed | $4,000,000 |
| Minimum separate account | $2,500,000 |
| Tax-exempt clients: | |
| Commingled | 170 |
| Separate | 14 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 2 |

First Interstate Bank of Casper is an equity, fixed-income, balanced, real estate and mineral interest manager.

Its equity approach is value-oriented and contrarian. It uses market timing and low p/e evaluation to purchase out-of-favor companies that have favorable financial characteristics and growth prospects. Its fixed-income approach stresses intermediate maturities of a two- to 12-year time frame. It makes limited use of options.

The parent is First Interstate Bancorp.

John McAteer, vice president and trust officer, is chief investment officer.

## First Interstate Bank of Denver

633 17th St., Denver, Colo. 80270; (303) 293-2211

| | |
|---|---|
| Total assets managed | $1,500,000,000 |
| Tax-exempt assets managed: | |
| Total | $0 |
| Minimum separate account | $250,000 |
| No. of portfolio managers | 15 |
| Size of research staff | 8 |

First Interstate Bank of Denver is an equity, fixed-income and balanced manager.

Its equity approach uses growth and low p/e stocks. Its fixed-income approach uses sector analysis.

Denver Investment Advisors, a subsidiary of the bank that is profiled elsewhere in this issue, manages $572 million from 170 tax-exempt clients on behalf of the bank.

The bank follows 130 stocks closely and 200, generally; 70% of research is generated internally.

The parent company is First Interstate Bancorp.

John Resetarits is client contact.

## First Interstate Bank of Oregon, Capital Management Group

1300 S.W. Fifth Ave., Portland, Ore. 97201; (503) 225-2379

| | |
|---|---|
| Total assets managed | $2,100,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,014,000,000 |
| Commingled | $250,000,000 |
| Separate | $764,000,000 |
| 401(k)/457 assets managed | $30,000,000 |
| 401(k)/457 clients | 48 |
| Real estate assets managed | $55,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 180 |
| Separate | 117 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 12 |
| Size of research staff | 3 |

First Interstate Bank of Oregon, Capital Management Group is an equity, fixed-income, balanced, real estate and international manager.

Its equity approach uses stocks with very low p/es. Its portfolios are structured for low risk, low portfolio beta of 0.8 to 0.9, and high yield.

Its fixed-income approach is passive, focusing on the intermediate sector of the bond market. Average maturity ranges from five to 12 years.

The asset mix Jan. 1 was 40% stocks, 46% bonds, 9% cash and 5% mortgage-backed securities.

Clients include Niagara Mohawk Power, Northwest Natural Gas, Louisiana-Pacific and Freightliner.

The parent company is First Interstate Bancorp.

Dennis Wood, vice president and manager-investment advisory services, is chief investment officer; Jan Dawson, vice president-employee benefit services, is the client contact.

## First Interstate Bank of Washington

PO Box 21927, Seattle, Wash. 98111; (206) 343-8346

| | |
|---|---|
| Total assets managed | $2,600,000,000 |
| Tax-exempt assets managed: | |
| Total | $705,000,000 |
| Commingled | $53,000,000 |
| Separate | $652,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 250 |
| Separate | 90 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 9 |

First Interstate Bank of Washington is an equity, fixed-income and balanced manager.

Its equity approach follows Graham & Dodd principles while emphasizing low volatility, high dividend yield, high EPS stability, industrial sector shifting and large-cap stocks, with moderate concentration in sectors or issues. Options are used.

Its fixed-income approach emphasizes high credit quality and yield pickup swapping, with moderate emphasis on laddered maturity shifting and sector shifting.

The asset mix Jan. 1 was 45% stocks, 40% bonds and 15% cash.

J. Clark Reardon, senior vice president and trust officer, is chief investment officer; Lawrence T. Divers, vice president and trust officer, is client contact.

## First Interstate Trust Co. of Wisconsin

636 Wisconsin Ave. P.O. Box 171, Sheboygan, Wis. 53082-0171; (414) 459-2070

| | |
|---|---|
| Total assets managed | $495,000,000 |
| Tax-exempt assets managed: | |
| Total | $185,000,000 |
| Commingled | $55,000,000 |
| Separate | $130,000,000 |
| Real estate assets managed | $22,000,000 |
| International assets managed | $2,000,000 |
| Indexed assets managed | $3,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 130 |
| Separate | 332 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 4 |
| Size of research staff | 2 |

First Interstate Trust Co. of Wisconsin is an equity, fixed-income and balanced manager.

For equity investments, it uses value and growth philosophies, diversifying the approach within each account to obtain the highest risk-adjusted return. Options are used.

Its fixed-income approach uses interest rate anticipation and sector analysis. Generally, the bank focuses on short to intermediate sectors, looking for quality and using spreads between quality and various instruments.

Its real estate approach is limited, mostly to limited partnerships and some inflation hedge.

The parent company is First Interstate Bank of Wisconsin.

Michael J. Millhouse, vice president, is chief investment officer; Fred M. Hollander, vice president, is client contact.

## First Investment Management

120 N. Robinson Ave., Suite 860 West, Oklahoma City, Okla. 73102; (405) 272-4202

| | |
|---|---|
| Total assets managed | $1,587,000,000 |
| Tax-exempt assets managed | $1,587,000,000 |
| 401(k)/457 assets managed | $15,000,000 |
| 401(k)/457 clients | 10 |
| Real estate assets managed | $30,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 150 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 5 |
| Size of research staff | 3 |

First Investment Management is an equity, fixed-income, balanced, GIC and convertible securities manager.

Its equity approach uses a multifactor decision framework incorporating value, earnings and price momentum components along with distinct buy, hold and sell decision rules for each equity sector. Options are used.

Its fixed-income approach is based on adjusting maturities according to the expected trend in interest rates. The trend forecast is derived from an internally developed asset allocation framework.

The asset mix Jan. 1 was 14.6% stocks, 60.6% bonds, 17.6% cash, 1.3% mortgages, 1% mortgage-backed securities and 4.9% other investments.

The parent company is First Interstate Bank of Oklahoma.

Clients include The Noble Foundation, Shriners Hospitals and Oklahoma Gas & Electric.

C. Lee Liscom, senior portfolio manager, is chief investment officer; Richard H. Parry, senior portfolio manager-marketing, is client contact.

## First Jersey National Bank

1 Gateway Center, Newark, N.J. 07102; (201) 648-8027

| | |
|---|---|
| Total assets managed | $1,250,000,000 |
| Tax-exempt assets managed: | |
| Total | $375,000,000 |
| Commingled | $155,000,000 |
| Separate | $220,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients: | |
| Commingled | 184 |
| Separate | 247 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 8 |

First Jersey National Bank is an equity, fixed-income and balanced manager.

Its value-oriented equity strategy emphasizes Graham & Dodd analysis of emerging growth, growth and low p/e stocks, and market timing in its top-down stock selection.

Its fixed-income approach is macroeconomic, using active management in maturity structure, quality distribution and sector selection.

The bank follows 50 stocks closely and 150, generally; 10% of research is generated internally.

Clients include NL Industries, Flexi-Van and Teamsters Welfare Fund (Locals 469 and 617).

The parent company is National Westminster Bancorp.

John J. Saueracker is chief investment officer; J. Thomas Chiolo is client contact.

## First Kentucky Co.

101 S. Fifth St., Louisville, Ky. 40202; (502) 581-7668

| | |
|---|---|
| Total assets managed | $1,896,000,000 |
| Tax-exempt assets managed | $1,700,000,000 |
| Dedicated funds managed | $12,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 38 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 5 |
| Size of research staff | 4 |

First Kentucky Co. is an equity, fixed-income and balanced manager.

Its equity approach focuses on financially sound companies currently undervalued as measured by high yield, low p/e or above-average growth potential in relation to price.

Its fixed-income approach follows interest rate trends, continually repositioning sectors (industries, qualities, maturities, coupon) while maintaining high-quality call-protected portfolios with effective duration plus or minus the index.

The asset mix Jan. 1 was 27% stocks, 54% bonds and 19% cash.

The firm follows 50 stocks closely and 150, stocks generally; 75% of research is generated internally.

The parent company is First Kentucky National Corp.

Irvin W. Quesenberry, senior vice president, is chief investment officer; John H. Yost, senior vice president, is client contact.

## First Kentucky Trust Co.

101 S. Fifth St., Louisville, Ky. 40202; (502) 581-4050

| | |
|---|---|
| Total assets managed | $5,002,000,000 |
| Tax-exempt assets managed: | |
| Total | $2,174,000,000 |
| Commingled | $192,000,000 |
| Separate | $1,982,000,000 |
| 401(k)/457 assets managed | $2,000,000 |
| 401(k)/457 clients | 6 |
| Real estate assets managed | $44,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 250 |
| Separate | 160 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 4 |
| Size of research staff | 4 |

First Kentucky Trust Co. is an equity, fixed-income and balanced manager.

Its equity approach uses a fully invested diversified portfolio chosen from four value screens: growth, high-yield, low p/e and low price-to-book with an emphasis on fundamental and valuation analysis.

Using sector analysis and within client guidelines, its fixed-income approach models the index bogey trading actively for incremental return maintaining high average quality, duration target and call protection.

The asset mix Jan. 1 was 44% stocks, 34% bonds, 20% cash and 2% mortgages.

The bank follows 100 stocks closely and 300 generally; 75% of the research is generated internally.

The parent company is First Kentucky National Corp.

Stanley A. Rourke, senior vice president, is the chief investment officer; John H. Yost, senior vice president, is the client contact.

## First Manhattan Capital Management

437 Madison Ave., New York, N.Y. 10022; (212) 832-4736

| | |
|---|---|
| Total assets managed | $1,850,000,000 |
| Tax-exempt assets managed | $1,850,000,000 |
| Minimum separate account | $30,000,000 |
| Tax-exempt clients | 33 |
| Types of accounts managed | CF |
| No. of portfolio managers | 8 |
| Size of research staff | 13 |

First Manhattan Capital Management, an equity manager, emphasizes Graham & Dodd analysis and low p/e stocks in a bottom-up, risk-averse strategy. It buys companies with high returns on equity and low financial leverage at prices substantially below business values, and holds positions for long-term results.

**Key to abbreviations**

C: Corporate account
E: Educational endowments
F: Private foundations
G: U.S. state and local gov'ts
J: Jointly trusteed
P: Canadian provincial gov'ts
U: Unions (Canadian firms only)

The asset mix Jan. 1 was 85% stocks and 15% cash.

The firm follows 600 stocks closely and 1,500, generally; 80% of research is generated internally.

The parent is First Manhattan Co.

David S. Gottesman, managing partner, and Robert M. Howitt, president, are chief investment officers; Gregory B. Densmore, vice president, is client contact.

### First Maryland Asset Management

25 S. Charles St., Baltimore, Md. 21201; (301) 244-4000

| | |
|---|---|
| Total assets managed | $600,000,000 |
| Tax-exempt assets managed: | |
| Total | $550,000,000 |
| Commingled | $40,000,000 |
| Separate | $510,000,000 |
| 401(k)/457 assets managed | $20,000,000 |
| 401(k)/457 clients | 10 |
| Real estate assets managed | $60,000,000 |
| International assets managed | $2,000,000 |
| Dedicated assets managed | $7,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 200 |
| Separate | 100 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 6 |
| Size of research staff | 3 |

First Maryland Asset Management is an equity, fixed-income and balanced manager.

Its investment approach is top-down, emphasizing asset allocation. Within stock segments, the focus is on sector selection. In fixed income, interest rate anticipation is used to determine bond durations and sector analysis is used to choose securities.

The asset mix Jan. 1 was 50% stocks, 34% bonds, 5% cash and 11% mortgage-backed securities; $2 million was in foreign stocks.

The parent company is First National Bank of Maryland.

Brian R. Mund, senior vice president, is chief investment officer; Jennifer W. Lambdin, vice president, is client contact.

### First Midwest Bank/Illinois

50 W. Jefferson St., Joliet, Ill. 60431; (815) 727-5222

| | |
|---|---|
| Total assets managed | $250,000,000 |
| Tax-exempt assets managed: | |
| Total | $125,000,000 |
| Separate | $125,000,000 |
| Tax-exempt clients | 45 |
| Types of accounts managed | CG |
| No. of portfolio managers | 1 |
| Size of research staff | 2 |

First Midwest Bank/Illinois is an equity, fixed-income and balanced manager.

Its equity approach focuses on low p/e stocks. Its fixed-income approach is passive.

The bank follows 50 to 60 stocks closely; 10% of research is generated internally.

The parent company is First Midwest Bancorp Inc.

Paul E. Gantzert is chief investment officer; Terry Beaudry, vice president and trust officer, is client contact.

### First National Bank of Omaha

P.O. Box 3128, Omaha, Neb. 68103; (402) 341-0500

| | |
|---|---|
| Total assets managed | $900,000,000 |
| Tax-exempt assets managed: | |
| Total | $525,000,000 |
| Commingled | $60,000,000 |
| Separate | $465,000,000 |
| 401(k)/457 assets managed | $10,000,000 |
| 401(k)/457 clients | 25 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients: | |
| Commingled | 270 |
| Separate | 33 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 6 |
| Size of research staff | 1 |

First National Bank of Omaha is an equity, fixed-income and balanced manager.

Its equity style uses Graham & Dodd analysis in a bottom-up, value-oriented, long-term approach dealing with larger, seasoned companies with sound fundamentals and selling at reasonable prices.

Its bond portfolios use a laddered approach, with about a 10% emphasis placed on the short or long portion based on the firm's economic outlook. This means portfolios have constantly maturing issues and can take advantage of interest rate increases. Minimum rating is A; maximum maturity is 25 years.

The asset mix Jan. 1 was 40% stocks, 50% bonds and 10% cash.

Clients include Omaha Public Power and Omaha Civilian Employees.

The parent company is First National of Nebraska Inc.

Thomas W. Allen is chief investment officer; Milton E. Lackey is client contact.

### First National Bank of Shreveport, Trust Division

P.O. Box 21116, Shreveport, La. 71154; (318) 226-2217

| | |
|---|---|
| Total assets managed | $1,004,000,000 |
| Tax-exempt assets managed: | |
| Total | $83,000,000 |
| Commingled | $35,000,000 |
| Separate | $48,000,000 |
| Real estate assets managed | $24,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients: | |
| Commingled | 171 |
| Separate | 178 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 3 |
| Size of research staff | 3 |

First National Bank of Shreveport, Trust Division is an equity, fixed-income, balanced and real estate manager.

Its equity approach is quantitative and value-oriented, with a focus on low p/e stocks. Its fixed-income approach uses interest rate anticipation. Options are used.

The parent is Premier Bancorp.

David B. Murphy is chief investment officer; Alex R. Ivins is client contact.

### The First National Bank & Trust Co. of Tulsa

P.O. Box 1, Tulsa, Okla. 74193; (918) 586-5272

| | |
|---|---|
| Total assets managed | $1,400,000,000 |
| Tax-exempt assets managed: | |
| Total | $267,000,000 |
| Commingled | $19,000,000 |
| Separate | $248,000,000 |
| Real estate assets managed | $19,000,000 |
| Dedicated assets managed | $19,000,000 |
| Tax-exempt clients: | |
| Commingled | 80 |
| Separate | 274 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 5 |

First National Bank & Trust Co. of Tulsa is an equity, fixed-income and balanced manager.

The bank is an active equity manager, emphasizing companies with above-average rates of growth in earnings and dividends.

Its fixed-income approach is primarily interest rate anticipation with some sector rotation based on spread analysis.

The parent company is Banks of Mid-America.

Thomas W. Weeks, senior vice president and senior trust investments officer, is chief investment officer; R.K. McManus, vice president and trust officer, is client contact.

### First National Bank in Wichita Trust Department

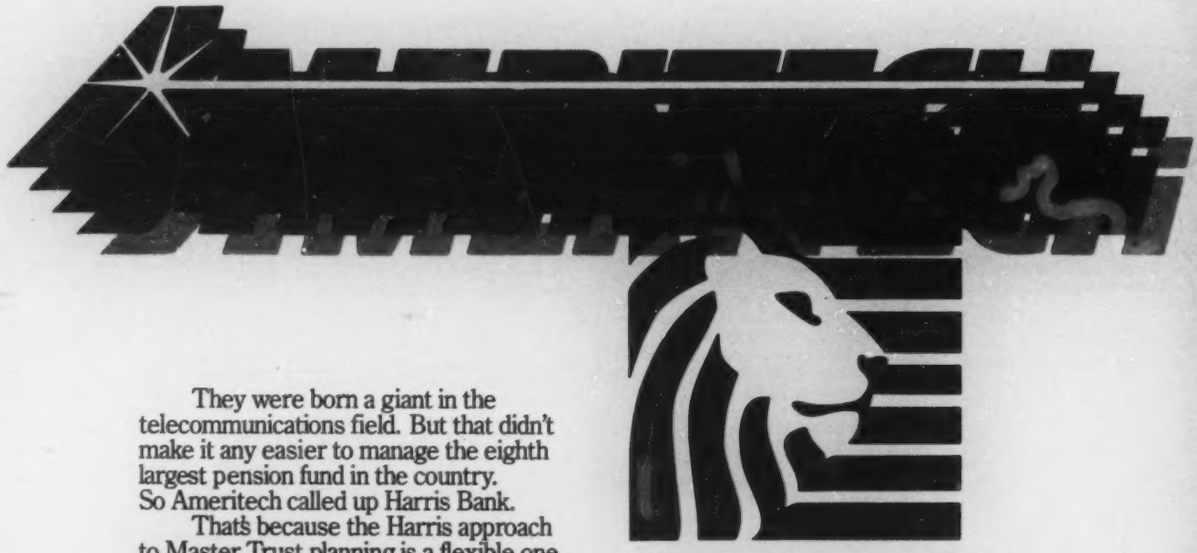
Box 1, Wichita, Kan. 67201; (316) 268-1331

| | |
|---|---|
| Total assets managed | $77,000,000 |
| Tax-exempt assets managed: | |
| Total | $77,000,000 |
| Commingled | $15,000,000 |
| Separate | $62,000,000 |
| Real estate assets managed | $2,000,000 |
| Dedicated assets managed | $4,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients: | |
| Commingled | 66 |
| Separate | 33 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 3 |
| Size of research staff | 1 |

First National Bank in Wichita is an equity, fixed-income, balanced and real estate manager.

Its disciplined equity approach uses the following models: economic forecast; financial ratios; Graham & Dodd; consensus; technical; and risk/reward. Its active fixed-income approach uses interest rate anticipation and sector analysis in short/intermediate duration management. Its real estate approach offers active management of farm and


# When Ameritech needed a Master Trust who did they dial for information?



They were born a giant in the telecommunications field. But that didn't make it any easier to manage the eighth largest pension fund in the country. So Ameritech called up Harris Bank.

That's because the Harris approach to Master Trust planning is a flexible one. Rather than a preset service package, we offered Ameritech a custom-tailored plan to meet their specific needs. A plan that can be further adapted, as their needs grow and change.

This kind of cooperative planning means we do more than respond to requests. We initiate ideas. And offer expert help, not just from one source person, but from various levels of our Master Trust department.

For Ameritech, the Harris brand of flexible teamwork made the best Master Trust connection. See what we can do for you. Call our Marketing Representative at (312) 461-7956.

The Harris. Move up to the Banking Lion.

Harris Trust and Savings Bank, 111 W. Monroe St., Chicago, IL 60603. Member FDIC, Federal Reserve System.

commercial properties.

The parent is First Bancorp.

Michael B. Colgan, vice president and trust investment officer, is chief investment officer; Roger Zellers is client contact.

## First Pacific Advisors Inc.

10301 W. Pico Blvd., Los Angeles, Calif. 90064; (213) 277-4900

| | |
|---|---|
| Total assets managed | $1,823,000,000 |
| Tax-exempt assets managed | $1,285,000,000 |
| Real estate assets managed | $150,000,000 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients | 29 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 4 |
| Size of research staff | 2 |

First Pacific Advisors Inc. is an equity, fixed-income and balanced manager.

It is a fundamental, disciplined, value-oriented equity investor, applying specific criteria to identify superior companies and determine attractive prices. Options are used occasionally.

Its fixed-income approach is also value-oriented.

The asset mix Jan. 1 was 57% stocks, 10% bonds, 22% cash and 11% mortgage-backed securities.

The firm follows 100 stocks closely and 300 generally; 80% of research is generated internally.

The parent is the Angeles Corp.

Clients include Rockwell International, GTE, Xerox and Kraft.

George H. Michaelis, president, is chief investment officer; Lawrence P. McNeil, senior vice president, is client contact.

## First Quadrant Corp.

305 Madison Ave., Morristown, N.J. 07960; (201) 285-7119

| | |
|---|---|
| Total assets managed | $6,200,000,000 |
| Tax-exempt assets managed | $60,000,000 |
| International assets managed | $2,000,000 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | C |
| No. of portfolio managers | 4 |

First Quadrant Corp. is an equity, fixed-income and balanced manager.

Its equity approach employs quantitative screening methods to create diversified portfolios whose p/e is lower and yield generally higher than the S&P 500.

Its fixed-income approach is active and uses sector analysis. Portfolios have durations longer than the Shearson Lehman Hutton Government/Corporate bond index. Options, stock index and fixed-income futures are used.

The parent is Xerox Financial Services.

Robert M. Lovell Jr., president, is chief investment officer and client contact.

## First RepublicBank Asset Management Co. Texas

P.O. Box 241, Dallas, Texas 75221; (214) 922-6506

| | |
|---|---|
| Total assets managed | $17,500,000,000 |
| Tax-exempt assets managed: | |
| Total | $9,992,000,000 |
| Commingled | $692,000,000 |
| Separate | $9,300,000,000 |
| Real estate assets managed | $187,000,000 |
| International assets managed | $31,000,000 |
| Indexed assets managed | $420,000,000 |
| Dedicated assets managed | $30,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 4,394 |
| Types of accounts managed | CEPGJ |
| No. of portfolio managers | 15 |
| Size of research staff | 6 |

First RepublicBank Asset Management Co. Texas is an equity, fixed-income, balanced, real estate, international, index, venture capital, energy, portfolio insurance and cash manager.

Its equity approach seeks growth-potential stocks using research to identify companies with lower p/e, lower-than-market price/book value and higher-than-market current yields.

Its active fixed-income approach takes advantage of market inefficiencies, using higher-yielding bonds through sector selection. Credit research and swapping provide incremental return. Options and financial futures are used.

In real estate, it looks for properties with long-term growth and stability; diversification is achieved by property.

The asset mix Jan. 1 was 50% stocks, 43% bonds, 5% cash and 2% equity real estate; $31 million was in foreign stocks, $370 million in equity index funds and $50 million in bond index funds.

The parent is First RepublicBank Texas.

H.E. Anderson, chairman, and David E. Hoener, president, are chief investment officers; David J. Pittman, senior vice president and director-trust institutional marketing, is client contact.

25 largest managers ranked by mortgage-backed securities assets

| | $ millions |
|---|---|
| Pacific Investment | 3,329 |
| Miller, Anderson, Sherrerd | 2,900 |
| J.P. Morgan | 2,600 |
| Alliance Capital | 1,668 |
| RCM Capital | 1,506 |
| Western Asset | 1,500 |
| Centerre Trust | 925 |
| Scudder, Stevens & Clark | 897 |
| Morgan Stanley Asset | 824 |
| T. Rowe Price | 802 |
| State Street R&M | 800 |
| Glenmede Trust | 550 |
| Duff & Phelps Investment | 500 |
| Fiduciary Trust | 500 |
| Lazard Freres | 500 |
| Wells Fargo | 500 |
| Lowe, Brockenbrough | 452 |
| Lehman | 450 |
| Capital Guardian | 418 |
| M.D. Sass | 405 |
| GE Investments | 400 |
| Nat'l Investment Services | 400 |
| Shin Roe & Farnham | 400 |
| Investment Counselors/Md. | 372 |
| Columbia Mgmt. | 355 |
| Total | 23,868 |

## First Security National Bank & Trust Co.

1 First Security Plaza, Lexington, Ky. 40507; (606) 231-1000

| | |
|---|---|
| Total assets managed | $800,000,000 |
| Tax-exempt assets managed: | |
| Total | $224,000,000 |
| Commingled | $29,000,000 |
| Separate | $195,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 103 |
| Separate | 186 |
| Types of accounts managed | CEPG |
| No. of portfolio managers | 3 |
| Size of research staff | 1 |

First Security National Bank & Trust Co. is an equity, fixed-income and balanced manager.

Its value-oriented stock selection is primarily based on an in-house valuation model modified by a subjective analysis of fundamental factors.

Its fixed-income approach uses interest rate anticipation with emphasis on maturities of 10 years or less to reduce volatility.

The parent company is First Security Corp. of Kentucky.

Jerry C. Troyer, vice president and senior trust investment officer, is chief investment officer; Barry V. Bond, vice president and trust development officer, is client contact.

## 1st Source Bank

100 N. Michigan St., South Bend, Ind. 46601; (219) 236-2000

| | |
|---|---|
| Total assets managed | $478,000,000 |
| Tax-exempt assets managed: | |
| Total | $160,000,000 |
| Commingled | $77,000,000 |
| Separate | $83,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients: | |
| Commingled | 350 |
| Separate | 100 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 4 |
| Size of research staff | 2 |

1st Source Bank is an equity, fixed-income and balanced manager.

It takes a yield approach to equity investments, focusing on growth and emerging growth stocks. Its fixed-income approach is passive. Options are used.

John S. Seidl, vice president and senior investment officer, is the chief investment officer; James P. Coleman, vice president and senior trust officer, is the client contact.

## First Tennessee Investment Management Inc.

Box 84, Memphis, Tenn. 38101; (901) 523-5651

| | |
|---|---|
| Total assets managed | $1,985,000,000 |
| Tax-exempt assets managed: | |
| Total | $906,000,000 |
| Commingled | $149,000,000 |
| Separate | $757,000,000 |
| Real estate assets managed | $27,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients: | |
| Commingled | 915 |
| Types of accounts managed | CEPGJ |
| No. of portfolio managers | 10 |
| Size of research staff | 9 |

First Tennessee Investment Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses sector rotation, looking for stocks with long-term growth in unit volume, sales and earnings. Options are used.

Its fixed-income approach uses interest rate anticipation and sector analysis to take advantage of yield curve and other temporary distortions in the market. Credit considerations are emphasized.

The asset mix Jan. 1 was 30% stocks, 59% bonds, 5% cash, 2% equity real estate, 1% mortgages and 3% mortgage-backed securities.

The parent company is First Tennessee National Corp.

William V. Pruett, president, is chief investment officer; Pat Kunnecke and Bill Woodson are client contacts.

## First Union National Bank

1200 First Union Plaza/CMG-16, Charlotte, N.C. 28288; (704) 371-5155

| | |
|---|---|
| Total assets managed | $6,400,000,000 |
| Tax-exempt assets managed: | |
| Total | $2,960,000,000 |
| Commingled | $1,770,000,000 |
| Separate | $1,130,000,000 |
| Indexed assets managed | $18,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients: | |
| Commingled | 1,765 |
| Separate | 120 |
| Types of accounts managed | CEPGJ |
| No. of portfolio managers | 28 |
| Size of research staff | 6 |

First Union National Bank is an equity, fixed-income and balanced manager.

Its equity approach uses Graham & Dodd principles identifying low p/e stocks. It invests in companies that have average to above-average financial characteristics and that sell substantially below market valuation levels.

Its fixed-income approach is conservative and based on interest rate anticipation, aiming to provide consistently positive returns, attractive levels of current income and capital gains when interest rates decline.

Stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 45% stocks, 35% bonds and 20% cash; $18 million was in equity indexed funds.

Clients include Ace Hardware, Sterling Drug, Chanel and Trailways.

The parent is First Union Corp.

William R. Hackney III is chief investment officer; Deborah L. Tate, national sales manager, is client contact.

## First Wachovia Corp.

301 N. Main St., Winston-Salem, N.C. 27150; (919) 770-5906

| | |
|---|---|
| Total assets managed | $8,100,000,000 |
| Tax-exempt assets managed: | |
| Total | $4,800,000,000 |
| Commingled | $875,000,000 |
| Separate | $3,925,000,000 |
| Real estate assets managed | $700,000,000 |
| Minimum separate account | $5,000,000 |
| Types of accounts managed | CEPG |
| No. of portfolio managers | 21 |
| Size of research staff | 10 |

First Wachovia Corp. is an equity, fixed-income, balanced, real estate, timberland and GIC manager.

Its equity approach is early identification of socioeconomic trends affecting the economy and markets and over- or underweighting the portfolio accordingly with quality companies selling at reasonable value.

Its fixed-income approach is multidisciplined, weaving judgments about the interest rate environment with opportunities to add value through sector rotation, security swapping and credit analysis.

Its real estate approach is to acquire properties when demand is low and develop when demand is high.

The asset mix Jan. 1 was 36% stocks, 33% bonds, 19% cash and 12% equity real estate.

The bank follows 125 stocks closely and 600 generally; 50% research is generated internally.

H. Vernon Winters is chief investment officer; Nick Verano, vice president and manager of marketing, is client contact.

## First Wisconsin Trust Co.

777 E. Wisconsin Ave., Milwaukee, Wis. 53202; (414) 765-4444

| | |
|---|---|
| Total assets managed | $3,166,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,883,000,000 |
| Commingled | $893,000,000 |
| Separate | $990,000,000 |
| 401(k)/457 assets managed | $362,000,000 |
| 401(k)/457 clients | 38 |
| Real estate assets managed | $8,000,000 |
| International assets managed | $3,000,000 |
| Indexed assets managed | $213,000,000 |
| Dedicated assets managed | $572,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 561 |
| Separate | 89 |
| Types of accounts managed | CEPGJ |
| No. of portfolio managers | 17 |

First Wisconsin Trust Co. is an equity, fixed-income, balanced, global/international, real estate and GIC manager.

It has two separate equity philosophies. First Wisconsin Asset Management, a subsidiary, emphasizes growth or capital appreciation in the management of three collective equity approaches. First Wisconsin Trust takes a more conservative, income-oriented approach for actively managed portfolios, emphasizing large-cap and some medium-cap issues. Current dividend yield and the prospect for dividend growth are important elements.

For fixed income it uses active, passive and quantitative investment techniques.

Its real estate approach uses unleveraged equity positions in existing, leased commercial properties to develop a stable income stream and potential appreciation.

The asset mix Jan. 1 was 13% stocks, 51% bonds, 34% cash, 0.5% equity real estate and 1.5% other.

The parent company is First Wisconsin Corp.

Jackson Kirk, first vice president, is chief investment officer; Robert Aubrecht, vice president, is client contact.

## FirsTier Bank, Lincoln

P.O. Box 81008, Lincoln, Neb. 68506; (402) 471-1307

| | |
|---|---|
| Total assets managed | $580,000,000 |
| Tax-exempt assets managed: | |
| Total | $235,000,000 |
| Commingled | $40,000,000 |
| Separate | $195,000,000 |
| Real estate assets managed | $9,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients: | |
| Commingled | 195 |
| Separate | 25 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 5 |

FirsTier Bank, Lincoln is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented focusing on low p/e and growth stocks; a major screen is earnings momentum. Based on interest rate anticipation, its fixed-income strategy calls for reducing volatility; maturities are not longer than 10 years.

The parent company is FirsTier Inc.

William S. Eastwood, vice president and manager-trust investment department, is chief investment officer; Norman Wilson, vice president-employee benefit administration, is client contact.

## Fischer, Francis, Trees & Watts Inc.

717 Fifth Ave., New York, N.Y. 10022; (212) 350-8050

| | |
|---|---|
| Total assets managed | $11,100,000,000 |
| Tax-exempt assets managed | $9,200,000,000 |
| Real estate assets managed | $350,000,000 |
| Dedicated funds managed | $280,000,000 |
| Minimum separate account | $50,000,000 |
| Tax-exempt clients | 33 |
| Types of accounts managed | CEPG |
| No. of portfolio managers | 12 |

Fischer, Francis, Trees & Watts Inc., a fixed-income manager, uses interest rate anticipation and sector analysis. It manages market risk and sector spread opportunities in prime quality issues with active trading. Hedged foreign securities are used, as are options and fixed-income futures.

The asset mix Jan. 1 was 96% bonds and 4% mortgage-backed securities.

The firm generates 85% of its research internally.

Clients include IBM, World Bank, Honeywell and New York City Retirement Systems.

Richard G. Fischer is chief investment officer; Cecilia M. Murphy is client contact.

## Fisher Investments Inc.

301 Henrik Road, Woodside, Calif. 94062; (415) 851-3334

| | |
|---|---|
| Total assets managed | $140,000,000 |
| Tax-exempt assets managed | $80,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 21 |
| Types of accounts managed | CPG |

Fisher Investments Inc. is an equity and balanced manager.

Its equity approach is qualitative and quantitative, using internally developed evaluation techniques to identify unpopular companies with strong balance sheets and business advantages where the potential earnings yield is twice the long-term bond yield.

Fixed income is used during poor stock market environments. Its fixed-income approach is passive, with the main emphasis on staggered maturities and credit risk. Government, corporate and convertible debentures are used.

Kenneth L. Fisher, president, is chief investment officer; Joseph L. Toms, managing director, is client contact.

## Fiske Capital Management

40 Grove St. P.O. Box 96, Wellesley, Mass. 02181; (617) 237-0010

| | |
|---|---|
| Total assets managed | $60,000,000 |
| Tax-exempt assets managed | $47,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 75 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Fiske Capital Management Inc., an equity manager, uses cyclical asset allocation between equities and cash. In rising markets it emphasizes high upside beta issues. It doesn't predict market direction but coordinates with it based on internally developed quantitative research models.

The firm follows 1,600 stocks closely; all research is generated internally.

Edwin F. Thrall Jr. is chief investment officer; Steven Vantine, director-portfolio operations, is client contact.

## Flagship Financial Inc.

1 First National Plaza Suite 910, Dayton, Ohio 45402-1501; (513) 461-0332

| | |
|---|---|
| Total assets managed | $182,000,000 |
| Tax-exempt assets managed | $3,000,000 |
| Tax-exempt clients | 1 |
| Types of accounts managed | C |
| No. of portfolio managers | 5 |

Flagship Financial Inc., a fixed-income manager, uses a highly disciplined decision-making process, with issue selection based on objective consensus, interest rate forecast and sector analysis.

The client is Mead Corp.

Richard P. Davis, president, is chief investment officer and client contact.

## Fleet National Bank

100 Westminster St., Providence, R.I. 02903; (401) 278-6000

| | |
|---|---|
| Total assets managed | $4,200,000,000 |
| Tax-exempt assets managed: | |
| Total | $2,100,000,000 |
| Commingled | $66,000,000 |
| Separate | $2,034,000,000 |
| Minimum separate account | $1,000,000 |

Tax-exempt clients:
Commingled ..... 310
Separate ..... 179
Types of accounts managed ..... CEFG
No. of portfolio managers ..... 16
Size of research staff ..... 6

Fleet National Bank is an equity, fixed-income and balanced manager.

It offers passive and value-oriented (low p/e) equity approaches. Its fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 45% stocks, 33% bonds and 22% cash.

The bank follows 200 stocks closely and 300, generally; 75% of research is generated internally.

Clients include Rhode Island State Employees, Cullinet Software and A.T. Cross.

The parent company is Fleet/Norstar Financial Group.

Harold A. MacKinney Jr., executive vice president, is the chief investment officer; Michael E. Hogan, trust officer, is the client contact.

## Flippin, Bruce & Porter Inc.

800 Main St. Suite 202, Lynchburg, Va. 24504; (804) 845-4900

Total assets managed ..... $202,000,000
Tax-exempt assets managed .... $124,000,000
Minimum separate account ..... $1,000,000
Tax-exempt clients ..... 12
Types of accounts managed ..... CEFJ
No. of portfolio managers ..... 2
Size of research staff ..... 1

Flippin, Bruce & Porter, Inc. is an equity and balanced manager.

Its equity approach is contrarian. Managers look beyond current investor emotion, discounting Wall Street expectations and relating historical financial characteristics to current price.

A contrarian fixed-income manager, the firm constructs a "barbell of quality," with BAA securities on the short end and AAA governments on the long end, producing a shorter average maturity with a higher-than-average yield.

Options are used.

John M. Flippin and John T. Bruce, principals, are chief investment officers; R.G. Porter, principal, is client contact.

## Foreign and Colonial Asset Management

45 Wall St., New York, N.Y. 10005; (212) 806-4480

Total assets managed ..... $3,875,000,000
Tax-exempt assets managed .... $35,000,000
International assets managed ... $35,000,000
Minimum separate account ..... $10,000,000
Tax-exempt clients ..... 9
Types of accounts managed ..... C
No. of portfolio managers ..... 26
Size of research staff ..... 4

Foreign and Colonial Asset Management, an international manager, is value-oriented, using sector rotation for Far East stocks. It emphasizes large-cap stocks in thinner markets and smaller-cap issues in mature, more liquid markets. Options, forwards and futures are used to hedge currency movements. Its fixed-income approach is based on interest rate anticipation.

The parent companies are F&C Management Group Ltd. and U.S. Trust of New York.

Eric Elstog is chief investment officer; John Holland, vice president and marketing director, is client contact.

## Forest Investment Associates

11 Piedmont Center, Suite 404, Atlanta, Ga. 30305; (404) 239-0986

Total assets managed ..... $42,000,000
Tax-exempt assets managed .... $30,000,000
Minimum separate account ..... $10,000,000
Tax-exempt clients ..... 1
Types of accounts managed ..... C
No. of portfolio managers ..... 2
Size of research staff ..... 1

Forest Investment Associates, a timberland manager, acquires and manages equity interests in timber and timberland in the United States with the objective of preservation of capital and appreciation in real terms.

Half of the research is generated internally.

Charles M. Tarver is chief investment officer; David S. Graham, principal, is client contact.

## Forstmann-Leff Associates

55 E. 52nd St., New York, N.Y. 10055; (212) 644-9888

Total assets managed ..... $3,969,000,000
Tax-exempt assets managed .. $3,936,000,000
Minimum separate account ..... $20,000,000
Tax-exempt clients ..... 61
Types of accounts managed ..... CEFJG
No. of portfolio managers ..... 7
Size of research staff ..... 4

Forstmann-Leff Associates Inc. is and equity and balanced manager.

Its risk-averse, capital preservation- and asset allocation-driven equity approach uses sector rotation and market timing. Management of fixed-income and cash equivalents, both used as equity substitutes, is keyed to interest rate forecasting and positioning on the yield curve. Stock index futures are used.

The asset mix Jan. 1 was 55% stocks, 21% bonds and 24% cash.

It follows 150 stocks closely and 250, generally; 50% of research is generated internally.

The parent company is Guinness Peat Group PLC.

Clients include Lockheed, Amoco, Marriott and Hughes.

Joel B. Leff, J. Anthony Forstmann and William F. Harnisch, managing directors, are the chief investment officers; Peter A. Lusk, executive vice president and director of marketing, is client contact.

## Fort Hill Investors Management Corp.

260 Franklin St., Boston, Mass. 02110; (617) 439-4488

Total assets managed ..... $386,000,000
Tax-exempt assets managed ... $359,000,000
Minimum separate account ..... $2,000,000
Tax-exempt clients ..... 52
Types of accounts managed ..... CEFJG
No. of portfolio managers ..... 8

Fort Hill Investors Management Corp. is an equity, fixed-income and balanced manager.

Its risk-averse equity approach uses emerging growth and low p/e stocks with market timing techniques.

Its active fixed-income approach uses interest rate anticipation and sector analysis.

The firm follows 140 stocks closely and 80, generally; 50% of research is generated internally.

The parent is MerchantsBank of Boston.

Clients include Massachusetts Laborers, Massachusetts Carpenters, TWA Machinists and Brockton Retirement.

John R. Lakian, chairman and chief executive officer, is chief investment officer; Robert P. Caccia, president, is client contact.

## Foyston, Gordon & Payne

10 King St. E., Toronto, Ontario M5C 1C3; (416) 362-4725

Total assets managed ..... $325,000,000
Tax-exempt assets managed:
Total ..... $225,000,000
For subsidiaries of U.S. firms . $90,000,000
Minimum separate account ..... $3,000,000
Tax-exempt clients ..... 20
U.S. subsidiaries ..... 6
Types of accounts managed ..... CEFU
No. of portfolio managers ..... 4

Foyston, Gordon & Payne Inc., a Canadian firm, is an equity, fixed-income and balanced manager.

Its equity approach combines growth and low p/e stocks from Graham & Dodd analysis. Stock selection is primarily bottom-up, using an in-house screening process for fundamentals.

Its fixed-income approach uses interest rate anticipation and sector analysis, concentrating on government securities augmented with high-quality corporate issues.

Peter G. Gordon, president, is chief investment officer and client contact.

## Franklin Asset Management Systems

777 Mariners Island Blvd., San Mateo, Calif. 94404; (415) 570-3078

Total assets managed ..... $500,000,000
Tax-exempt assets managed .... $200,000,000
Minimum separate account ..... $5,000,000
Tax-exempt clients ..... 15
Types of accounts managed ..... CE
No. of portfolio managers ..... 2
Size of research staff ..... 1

Franklin Asset Management Systems, an equity manager, uses growth and low p/e stocks.

The firm follows 500 stocks closely and 500, generally; all research is generated internally.

The parent company is Franklin Resources Inc.

Clients include Oregon, The Common Fund and the Chicago Transit Authority.

Marvin McClay is the chief investment officer; J. Paul Lewis, president, is the client contact.

## Franklin Portfolio Associates Trust

1 Post Office Square, Boston, Mass. 02109; (617) 423-4448

Total assets managed ..... $2,177,000,000
Tax-exempt assets managed .. $2,001,000,000
401(k)/457 assets managed ..... $58,000,000
401(k)/457 clients ..... 5
Minimum separate account ..... $10,000,000
Tax-exempt clients ..... 25
Types of accounts managed ..... CEF
No. of portfolio managers ..... 3
Size of research staff ..... 1

Franklin Portfolio Associates Trust is an equity manager.

Its investment approach is quantitative, using a multiple valuation approach to determine the relative attractiveness of a large universe of stocks. Portfolios are constructed to reflect individual client benchmarks.

The asset mix Jan. 1 was 98% stocks and 2% cash.

The firm follows 3,500 stock closely and 3,500, generally.

The parent is Mellon Bank Corp.

Clients include GM, Bell Atlantic, NYNEX and 3M.

John J. Nagorniak is chief investment officer; Spencer L. Timm, senior vice president, is client contact.

## Franklin Research & Development Corp.

711 Atlantic Ave., Boston, Mass. 02111; (617) 423-6655

Total assets managed ..... $145,000,000
Tax-exempt assets managed .... $50,000,000
International assets managed .... $1,000,000
Minimum separate account ..... $400,000
Tax-exempt clients ..... 31
Types of accounts managed ..... CEF
No. of portfolio managers ..... 10
Size of research staff ..... 4

Franklin Research & Development Corp. is an equity, fixed-income and balanced manager.

Its equity approach is earnings driven and sector rotational. It screens for social factors such as weaponry, South Africa, environmental and employee relations. Its fixed-income approach uses interest rate anticipation.

The firm is affiliated with Franklin Management.

Joan Bavaria is chief investment officer; Priscilla Wren, investment associate, and Edmund Bennett, vice president-marketing, are client contacts.

*Pensions & Investment Age* will highlight defined contribution plans on July 11.


Cutting diamonds and managing a pension fund have a lot in common.

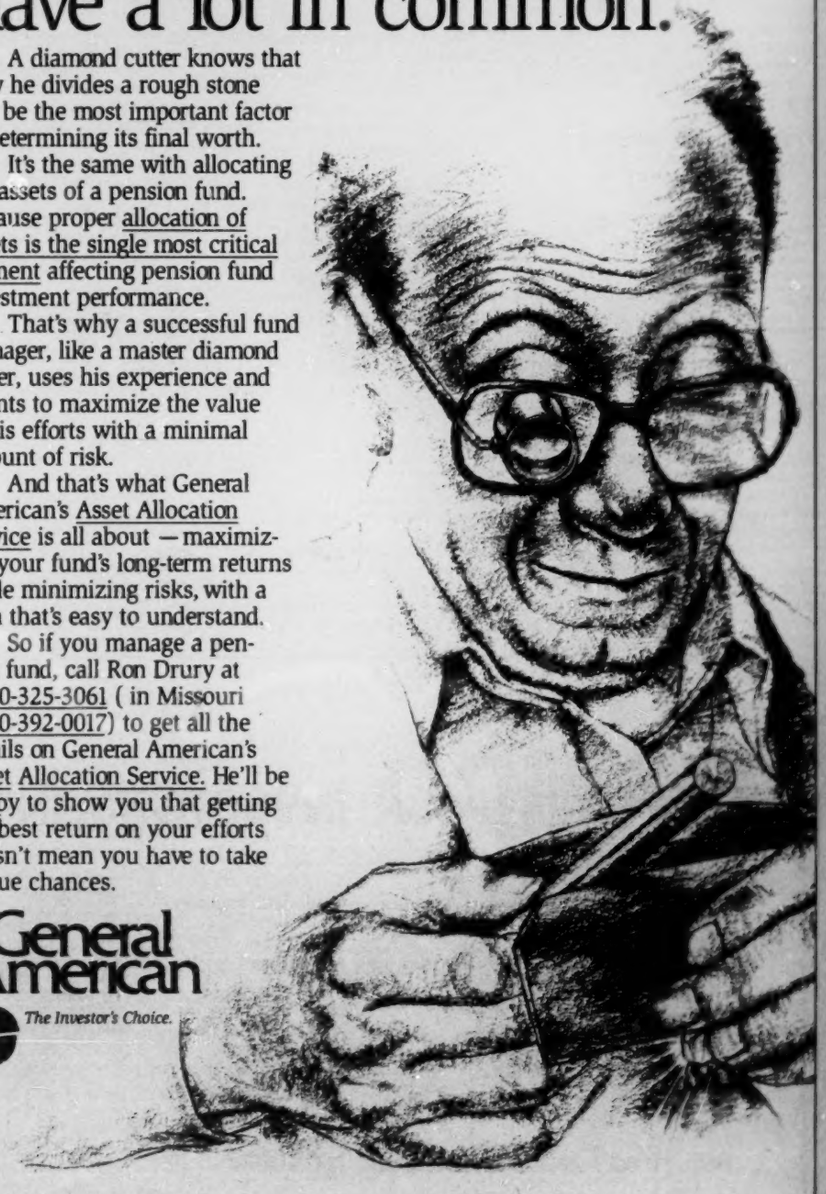
A diamond cutter knows that how he divides a rough stone will be the most important factor in determining its final worth.

It's the same with allocating the assets of a pension fund. Because proper allocation of assets is the single most critical element affecting pension fund investment performance.

That's why a successful fund manager, like a master diamond cutter, uses his experience and talents to maximize the value of his efforts with a minimal amount of risk.

And that's what General American's Asset Allocation Service is all about — maximizing your fund's long-term returns while minimizing risks, with a plan that's easy to understand.

So if you manage a pension fund, call Ron Drury at 1-800-325-3061 ( in Missouri 1-800-392-0017) to get all the details on General American's Asset Allocation Service. He'll be happy to show you that getting the best return on your efforts doesn't mean you have to take undue chances.



General American

The Investor's Choice.

## Fraser Management Associates Inc.

309 S. Willard P.O. Box 494, Burlington, Vt. 05402; (802) 658-0322

| | |
|---|---|
| Total assets managed | $83,000,000 |
| Tax-exempt assets managed | $22,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 35 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 4 |

Fraser Management Associates Inc. is an equity, fixed-income and balanced manager.

Its equity approach is contrarian and its fixed-income approach is passive.

The firm follows 60 stocks closely and 150, generally; 35% of research is generated internally.

James L. Fraser, president, is chief investment officer; David D. Steece, vice president, is client contact.

## Friess Associates Inc.

P.O. Box 4166, Greenville, Del. 19807; (302) 656-3017

| | |
|---|---|
| Total assets managed | $394,000,000 |
| Tax-exempt assets managed | $242,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 41 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 6 |
| Size of research staff | 5 |

Friess Associates Inc., an equity manager, uses growth stocks.

The firm follows 100 stocks closely; 85% of research is generated internally.

Clients include Vanderbilt University, Delmarva Power & Light, Wolverine Worldwide and Newcastle County Department of Personnel.

Foster S. Friess, chairman, is chief investment officer; Benjamin P. Detwiler is client contact.

## Froley, Revy Investment Co.

10900 Wilshire Blvd. Suite 1050, Los Angeles, Calif. 90024; (213) 208-4938

| | |
|---|---|
| Total assets managed | $544,000,000 |
| Tax-exempt assets managed | $442,000,000 |
| International assets managed | $7,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 31 |
| Types of accounts managed | CFG |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Froley, Revy Investment Co. Inc., an equity manager, invests in growth and small-cap companies through convertible securities.

The firm follows 100 stocks closely and the universe of convertible issues generally.

Clients include Gannett, U.S. Olympic Foundation and the Major League Baseball Players Association.

Thomas Revy and George Froley, managing directors, are the chief investment officers; Melinda J. Gordon, business development and client relations, is the client contact.

## Frontier Capital Management

286 Congress St., Boston, Mass. 02110; (617) 426-8880

| | |
|---|---|
| Total assets managed | $700,000,000 |
| Tax-exempt assets managed | $657,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 35 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 5 |
| Size of research staff | 4 |

Frontier Capital Management Co. is an equity and balanced manager.

Its equity approach focuses on companies with rapidly growing earnings. Frontier employs this approach in traditional growth and small-cap portfolios.

The firm follows 500 stocks closely and 3,000, generally; 65% of research is generated internally.

Clients include Donaldson, Lufkin & Jenrette; L.L. Bean; GTE; and GM.

J. David Wimberly is the chief investment officer; John A. McQuillkin is the client contact.

## Frost National Bank

P.O. Box 1600, San Antonio, Texas 78296; (512) 220-4361

| | |
|---|---|
| Total assets managed | $1,004,000,000 |
| Tax-exempt assets managed: | |
| Total | $210,000,000 |
| Commingled | $21,000,000 |
| Separate | $189,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients: | |
| Commingled | 140 |
| Separate | 65 |
| Types of accounts managed | EF |
| No. of portfolio managers | 6 |
| Size of research staff | 2 |

Frost National Bank is an equity, fixed-income and balanced manager. The bank also manages an equity fund of funds, using a data base to select the best mutual funds.

Its equity approach uses Graham & Dodd principles and proprietary valuation techniques to identify stocks undervalued in relation to the market. It uses options. Its fixed-income approach uses interest rate anticipation and sector analysis.

The parent is Cullen/Frost Bankers.

Vernon Torgerson, senior vice president, is the chief investment officer; Andrew S. Behrends, vice president, is the client contact.

## Furgueson Capital Management Inc.

19 W. 44th St., New York, N.Y. 10036; (212) 840-1781

| | |
|---|---|
| Total assets managed | $91,000,000 |
| Tax-exempt assets managed | $17,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 24 |
| Types of accounts managed | CE |
| No. of portfolio managers | 3 |

Furgueson Capital Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach emphasizes growth and emerging growth stocks analyzed through Graham & Dodd principles.

Its fixed-income approach is passive. Bonds are used for income and balance. Maturities usually are laddered to reduce interest rate risk.

The firm follows 50 stocks closely and 100, generally; 20% of research is generated internally.

Cornelius Furgueson IV is chief investment officer; Mr. Furgueson and Stephen Orr are client contacts.

# G

## GAMCO Investors Inc.

655 Third Ave., New York, N.Y. 10017; (212) 972-2350

| | |
|---|---|
| Total assets managed | $1,536,000,000 |
| Tax-exempt assets managed | $740,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 55 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 15 |
| Size of research staff | 5 |

GAMCO Investors Inc. is an equity manager.

Using Graham & Dodd analysis, its investment approach hinges on identifying asset-rich companies that are selling at a discount to their private market value, and where a catalyst has emerged to display these values.

The asset mix Jan. 1 was 77% stocks and 23% cash.

The firm follows 300 stocks closely and 600, generally; all research is generated internally.

The parent is The Gabelli Group Inc.

Clients include ITT, Honeywell, University of Texas and Virginia Supplemental Retirement System.

Mario J. Gabelli is chief investment officer; Douglas R. Jamieson, vice president, is client contact.

## Gannett, Welsh & Kotler Inc.

22 Batterymarch St., Boston, Mass. 02109; (617) 482-8900

| | |
|---|---|
| Total assets managed | $353,000,000 |
| Tax-exempt assets managed | $40,000,000 |
| International assets managed | $4,000,000 |
| Index funds managed | 4,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 30 |
| Types of accounts managed | CFJ |
| No. of portfolio managers | 6 |
| Size of research staff | 3 |

Gannett, Welsh & Kotler Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses quantitative and Graham & Dodd analysis with sector rotation. Its fixed-income approach uses interest rate anticipation. Options are used.

The firm follows 40 stocks closely and 100, generally; 75% of research is generated internally.

Harold G. Kotler, president, is chief investment officer; Susan M. Ambrozavitch, vice president, is client contact.

## Ganucheau, Stupfel & Brumley Investment Counsel

301 Commerce, Suite 1001, Fort Worth, Texas 76102; (817) 332-9915

| | |
|---|---|
| Total assets managed | $140,000,000 |
| Tax-exempt assets managed | $110,000,000 |
| Dedicated funds managed | $10,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 12 |
| Types of accounts managed | CF |
| No. of portfolio managers | 2 |

Ganucheau, Stupfel & Brumley Investment Counsel is an equity, fixed-income and balanced manager.

Its equity approach uses Graham & Dodd analysis in its value approach seeking low p/e, low price-to-book and low price-to-cash flow stocks.

Its fixed-income approach is passive, using laddered maturities.

Clients include American Airlines, St. Luke's Episcopal Hospital and Harbison Fischer.

Frank Ganucheau is chief investment officer; Lyle E. Brumley is client contact.

## Ganz Associates Inc.

1400 N.E. Miami Gardens Drive, North Miami Beach, Fla. 33160; (305) 949-2800

| | |
|---|---|
| Total assets managed | $167,000,000 |
| Tax-exempt assets managed | $85,000,000 |
| Real estate assets managed | $21,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 60 |
| Types of accounts managed | CFJ |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

Ganz Associates Inc. is an equity, fixed-income and balanced manager.

Its equity approach applies rigorous market timing analysis, focusing on growth stocks and active convertible bond management for total return.

Its fixed-income approach uses interest rate anticipation. A proprietary program using only Treasury issue is offered.

The firm follows 100 stocks closely and 1,500, generally; 50% of research is generated internally.

Charles B. Ganz, president, is chief investment officer and client contact.

## Gardner and Preston Moss

1 Winthrop Square, Boston, Mass. 02110; (617) 482-6500

| | |
|---|---|
| Total assets managed | $3,068,000,000 |
| Tax-exempt assets managed | $2,578,000,000 |
| Real estate assets managed | $126,000,000 |
| International assets managed | $258,000,000 |
| Dedicated funds managed | $41,000,000 |
| Minimum separate account | $400,000 |
| Tax-exempt clients | 474 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 21 |
| Size of research staff | 4 |

Gardner and Preston Moss Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses low p/e stocks with sector rotation and market timing techniques. Managers vary asset mix based on economic, technical and valuation factors and use industry-specific key variables and relative valuation measures to vary sector weightings.

For fixed income, managers vary maturity based on interest rate outlook and yield curve valuation. They change sector and quality based on relative value.

The asset mix Jan. 1 was 35% stocks, 44% bonds, 16% cash and 5% mortgage-backed securities.

The firm follows 180 stocks closely and 6,000, generally; about 50% of research is generated internally.

The parent company is Britannia Arrow Holdings PLC.

Clients include Washington Metropolitan Transit Authority, IC Industries and Blue Cross/Blue Shield United of Wisconsin.

G. Kinnear Pash, president, is chief investment officer; Sue-Ellen Whelan, assistant vice president, is client contact.

Leasing: Oct. 3.

## Garrett Realty Advisors

1509 Main St., Suite 1105, Dallas, Texas 75201; (214) 749-7777

| | |
|---|---|
| Total assets managed | $34,000,000 |
| Tax-exempt assets managed | $30,000,000 |
| Real estate assets managed | $30,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 6 |
| Types of accounts managed | CG |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

Garrett Realty Advisors, a real estate manager, purchases substantially leased industrial warehouse properties, at or below reproduction cost, in major U.S. distribution markets with strong credit tenants, primarily in the eastern half of the United States. The properties must be in industrial parks or along major interstate routes.

Joseph P. Garrett, president, is chief investment officer; Daniel H. Lawson is client contact.

## Garrison, Keogh & Co.

122 E. 42nd St., New York, N.Y. 10168; (212) 557-7440

| | |
|---|---|
| Total assets managed | $210,000,000 |
| Tax-exempt assets managed | $145,000,000 |
| International assets managed | $10,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 19 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 3 |

Garrison, Keogh & Co. is an equity and balanced manager.

Its equity approach uses emerging growth and low p/e stocks. Proprietary valuation screens are applied to a closely followed list of stocks with high returns, strong finances and low institutional ownership. Cash reserves are actively used to preserve capital. Bonds are bought only when risk/reward is favorable. Convertibles and selected high-yield issues are used.

Clients include Columbia University, Cowles Media and the ILGWU.

William G. Garrison, Thomas F. Keogh and William Bradford III are the chief investment officers; Mr. Bradford is client contact.

## Gateway Investment Advisers Inc.

400 TechneCenter Drive Suite 220, Cincinnati, Ohio 45150; (513) 248-2700

| | |
|---|---|
| Total assets managed | $250,000,000 |
| Tax-exempt assets managed | $86,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 30 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 3 |
| Size of research staff | 12 |

Gateway Investment Advisers Inc.'s primary strategy is dividend capture. It uses a computer program to evaluate stock prices and volume prior to ex-dividend dates. Call options and index put options are used for downside protection.

The firm follows 30 stocks closely and 80, generally; all research is generated internally.

Clients include Stockham Valve, O'Neill Foundation and Cintas.

Walter G. Sall, president, is chief investment officer; J. David Cummings and K. Bruce Jones, vice presidents, are client contacts.

## Geewax, Terker & Co.

99 Starr St., Phoenixville, Pa. 19460; (215) 935-3000

| | |
|---|---|
| Total assets managed | $2,100,000,000 |
| Tax-exempt assets managed | $2,100,000,000 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 29 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 4 |
| Size of research staff | 3 |

Geewax, Terker & Co., an equity manager, blends quantitative valuation analysis with sector rotation among growth/value stocks.

Options and stock index futures are used.

The asset mix Jan. 1 was 95% stocks and 5% cash.

It follows 2,000 stocks closely; 90% of research is generated internally.

Clients include Bell Atlantic, Rockefeller Foundation, Alcoa and International Paper.

John J. Geewax is chief investment officer and client contact.


# GAMCO INVESTORS, INC.

(Gabelli Asset Management Company)

- Ranked #1 equity manager for 5 years ended 12/87*
- Compound annual return:

| 5 year | 10 year |
|---|---|
| 23.5% | 25.2% |

Client Contact:
Regina Pitaro

655 Third Avenue • New York, NY 10017 (212) 972-2350

*CDA Investment Technologies, Inc.
Past performance is not necessarily an indication of future returns.

Inquiries invited.

## GE Investments

P.O. Box 7900, 292 Long Ridge Road, Stamford, Conn. 06904; (203) 357-4100

| | |
|---|---|
| Total assets managed | $27,400,000,000 |
| Tax-exempt assets managed | $19,900,000,000 |
| 401(k)/457 assets managed | $4,300,000,000 |
| 401(k)/457 clients | 2 |
| Real estate assets managed | $2,400,000,000 |
| International assets managed | $1,100,000,000 |
| Index funds managed | $3,000,000,000 |
| Dedicated funds managed | $1,900,000,000 |
| Tax-exempt clients | 16 |
| Types of accounts managed | CF |
| No. of portfolio managers | 15 |

GE Investments is an equity, fixed-income, balanced, real estate, international and private placements manager.

Its equity approach stresses growth and quality together with sector concentration. Systematic portfolios are quantitatively driven and value based.

Its fixed-income portfolios are actively managed using a relative value approach to domestic vs. international bond diversification. Financial futures and options are used.

In real estate, it makes direct investments in high-quality, well-located assets in major metropolitan areas, and uses aggressive property management, leasing and innovative financing techniques to maximize value.

The asset mix Jan. 1 was 39% stocks, 28% bonds, 14% cash, 8% equity real estate, 2% mortgages, 2% mortgage-backed securities and 7% private placements.

An additional $1.3 billion is managed externally on behalf of GE Investments.

The parent company is General Electric Co.

D.F. Frey, chairman and president, is chief investment officer; G.R. Norman, executive vice president, is client contact.

## General American Investors

330 Madison Ave., New York, N.Y. 10017; (212) 916-8408

| | |
|---|---|
| Total assets managed | $1,533,000,000 |
| Tax-exempt assets managed | $1,246,000,000 |
| International assets managed | $120,000,000 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients | 21 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 3 |
| Size of research staff | 7 |

General American Investors Co. Inc., an equity manager, has a fundamental analysis orientation and emphasizes growth stocks. It uses bottom-up stock selection and a three-year time frame with stocks having a 50% appreciation potential and minimum downside risk if potential isn't realized.

The asset mix Jan. 1 was 93% stocks and 7% cash; $120 million was in foreign stocks.

The firm follows 200 stocks closely and 400, generally; 90% of research is generated internally.

Clients include GTE, New York State Teachers, Yale and Knight Foundation.

Malcolm Smith, president, is chief investment officer; James B. Book IV, director of marketing, is client contact.

## General American Life Insurance Co.

P.O. Box 396, St. Louis, Mo. 63166; (314) 231-1700

| | |
|---|---|
| Total assets managed | $1,370,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,370,000,000 |
| Pooled accounts | $131,000,000 |
| Separate accounts | $151,000,000 |
| GICs | $693,000,000 |
| Other | $395,000,000 |
| 401(k)/457 assets managed | $200,000,000 |
| 401(k)/457 clients | 103 |
| Real estate assets managed | $186,000,000 |
| Indexed assets managed | $56,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 228 |
| Types of accounts managed | CFGJ |
| No. of portfolio managers | 7 |
| Size of research staff | 3 |

General American Life Insurance Co. is an equity, fixed-income and balanced manager.

In equities, it offers an S&P 500 index fund, an NYSE low-cap fund and an actively managed fund using Morgan Stanley Asset Management as the investment adviser.

In fixed income, it offers two pooled bond accounts: one of actively managed public bonds, and another of passively managed private placements.

It originates mortgages and purchases real estate in areas where demand is expected to remain strong.

The separate account asset mix Jan. 1 was 8.1% stocks, 13.7% bonds, 12.2% cash and 66% mortgages; $23 million was in equity index funds and $33 million in bond index funds.

Leonard M. Rubenstein and Donald L. Smith are chief investment officers for securities and real estate, respectively; Ronald O. Drury, vice president-sales and marketing, is client contact.

## Geneva Capital Management

135 W. Wells St. Suite 640, Milwaukee, Wis. 53203; (414) 224-6002

| | |
|---|---|
| Total assets managed | $18,000,000 |
| Tax-exempt assets managed | $17,000,000 |
| Real estate assets managed | $510,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 24 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |

Geneva Capital Management Ltd. is an equity, fixed-income and balanced manager.

Its equity approach focuses on growth stocks; emphasis is on companies with healthy balance sheets, market leadership positions, earnings dynamics, low-cost production and minimum annual sales of $100 million.

Its fixed-income approach is passive. Bonds with maximum maturity of 10 years and minimum A rating are targeted. Volatility is reduced through laddered maturities.

William A. Priebe, president, is chief investment officer; Amy S. Croen, vice president, is client contact.

## GeoCapital Corp.

655 Madison Ave., New York, N.Y. 10021; (212) 935-0111

| | |
|---|---|
| Total assets managed | $430,000,000 |
| Tax-exempt assets managed | $412,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 17 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 2 |
| Size of research staff | 3 |

GeoCapital Corp., a small-capitalization equity manager, uses a combination of high-growth technology investments and companies selling below their long-term intrinsic value, thus providing reduced short-term volatility without sacrificing superior long-term return potential.

It follows 40 stocks closely and 75, generally; 90% of research is generated internally. Clients include GTE, Southwestern Bell and Batus.

Irwin Lieber, president, is chief investment officer; Barry Fingerhut is client contact.

## GeoVest Advisors Inc.

245 Willowbrook Office Park, 1451 Pittsford-Victor Road, Fairport, N.Y. 14450; (716) 248-5050

| | |
|---|---|
| Total assets managed | $10,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $500,000 |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

GeoVest Advisors Inc. is an equity, fixed-income, balanced, international, GIC and options and futures manager.

Its equity approach focuses on international market psychology, using market timing and a value orientation.

Its fixed-income approach is based on interest rate anticipation, closely monitoring the international impact of economic and political events worldwide. Options, stock index futures and fixed-income futures are used.

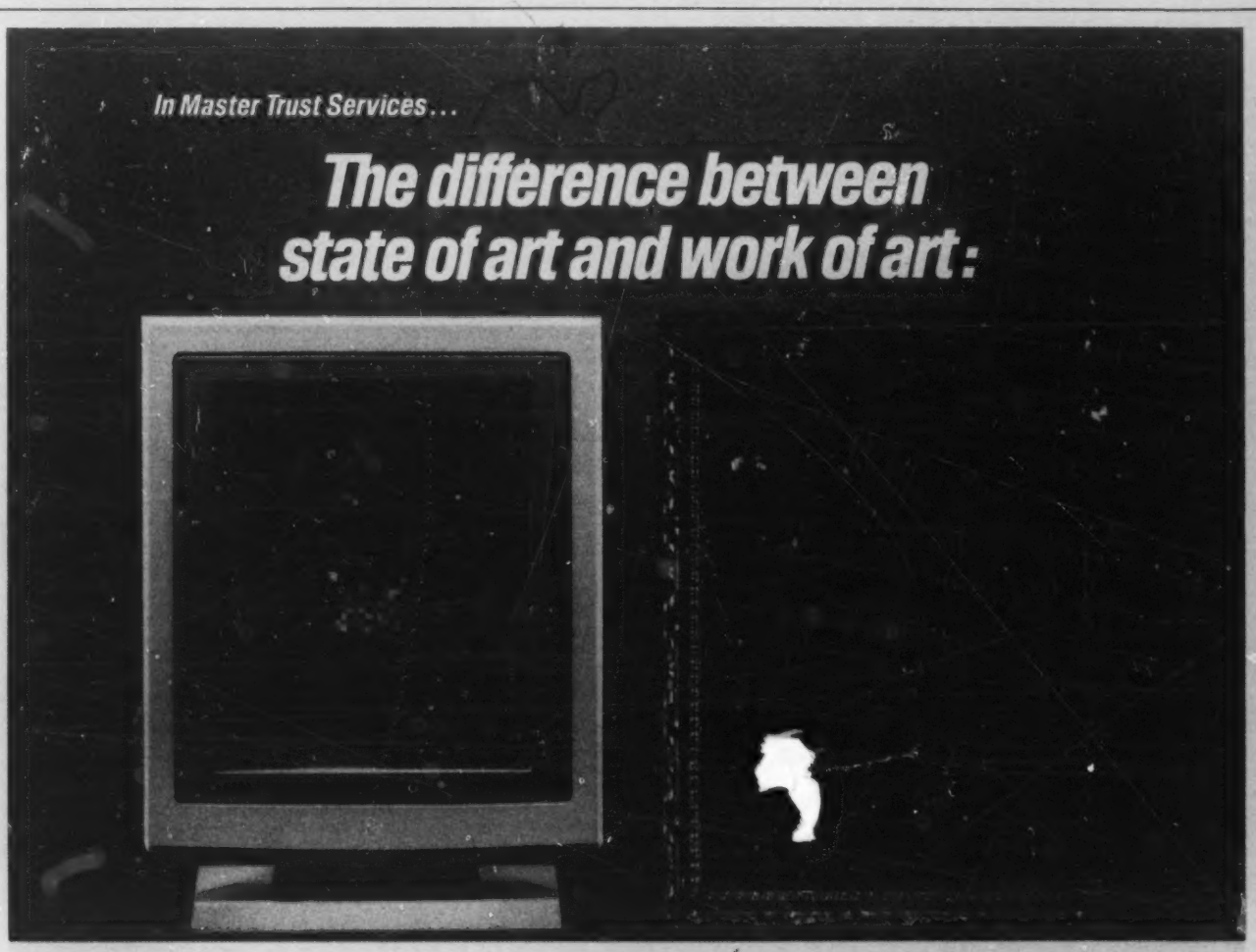
The firm follows 30 stocks closely and 100, generally; 25% of research is generated internally.

Eric Koch is chief investment officer; Daniel Donnelly is client contact.

## Kenneth J. Gerbino & Co.

9595 Wilshire Blvd. Sute 200, Beverly Hills, Calif. 90212; (213) 550-6304

| | |
|---|---|
| Total assets managed | $40,000,000 |
| Tax-exempt assets managed | $10,000,000 |
| International assets managed | $1,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 80 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |
| Size of research staff | 2 |


the hands of a master.

At First Pennsylvania Bank, advanced technology is only part of the picture. Our clients receive personalized service from a staff of professionals well practiced in the art of master trust/custody administration ...over $30 billion in assets and growing.

This experience and individual attention to your account allow us to design an administrative plan for you that's flexible and responsive, from a palette of services that includes portfolio reporting, analysis and comparison, securities lending, direct dial-up access, and more. And each plan is as distinctively different from any other as a work of art is from a computer portrait.

For more information, or a look at some typical examples in our gallery of master works, call James F. McHale, Senior Vice President, Trust and Investment Services Group, at (215) 786-7946.

First Pennsylvania Bank N.A.
Philadelphia, PA 19101

We hear you.

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FPB-100

Kenneth J. Gerbino & Co. is an equity, fixed-income and balanced manager.

Based on a proprietary economic model, it takes a top-down, long-term investment approach, attempting to take advantage of short-term valuation disparities. Its fixed-income approach uses interest rate anticipation, adjusting maturity dates to reflect the position in the credit cycle.

The firm follows 30 stocks closely and 80, generally.

Kenneth J. Gerbino is the chief investment officer; Michael J. Dlack is the client contact.

## GIM Global Advisors Inc.

745 Broad St., Newark, N.J. 07101; (201) 877-7805

| | |
|---|---|
| Total assets managed | $40,000,000 |
| Tax-exempt assets managed | $40,000,000 |
| International assets managed | $40,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 1 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |
| Size of research staff | 3 |

GIM Global Advisors Inc. is a global and international manager.

Its investment approach is top-down and macroeconomic. In equities, country and sector rotation are used emphasizing markets and companies experiencing an acceleration in earnings growth. In fixed income, interest rate anticipation is used with technical research to actively manage country exposure, currencies and maturities.

Options are used and stock index futures sometimes used.

Its real estate approach is opportunistic, using indirect investments (equity REITS or real estate companies).

The parent is B.V. Algemeen Vermogensbeheer (General Investment Management) GIM. The firm is an affiliate of Prudential Asset Management.

Peter S. Zwart, chairman, is chief investment officer; Joseph D. Reed, president, is client contact.

## Gintel Equity Management

No. 6 Greenwich Office Park, Greenwich, Conn. 06830; (203) 622-6400 or (800) 243-5808

| | |
|---|---|
| Total assets managed | $177,000,000 |
| Tax-exempt assets managed | $75,000,000 |
| Minimum separate account | $1,000,000 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 2 |
| Size of research staff | 3 |

Gintel Equity Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented using low p/e and Graham & Dodd analysis. The firm looks for emerging growth stocks and is willing to concentrate in 25 stocks of less.

Its fixed-income approach emphasizes interest rate anticipation and seeks relative value as seen by the yield spreads between issues and/or quality sectors.

The firm follow 40 stocks closely and 60, generally; 95% of research is generated internally.

Robert Gintel is chief investment officer; A.L. Robinson Jr. is client contact.

## GIT Investment Funds

1655 N. Fort Meyer Drive, Arlington, Va. 22209; (800) 336-3063 or (703) 528-6500

| | |
|---|---|
| Total assets managed | $362,000,000 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 5 |
| Size of research staff | 1 |

GIT Investment Funds is an equity and fixed-income manager that deals in mutual funds.

Its equity approach emphasizes low p/e ratios and offers products in aggressive-growth, equity-income and growth-income funds.

Its fixed-income approach is driven by interest rate anticipation.

The firm cannot break out tax-exempt accounts from among its mutual fund clients.

The parent company is Bankers Finance Investment Management Corp.

Thomas Miller is chief investment officer for stocks; Richard Gunn, for bonds. Elizabeth Henry, customer service manager, is client contact.

## Glass, Austin & Calvert Inc.

Suite 1100 InterFirst Plaza, 300 Convent St., San Antonio, Texas 78205; (512) 224-8241

| | |
|---|---|
| Total assets managed | $603,000,000 |
| Tax-exempt assets managed | $202,000,000 |
| International assets managed | $10,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 30 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 4 |
| Size of research staff | 2 |

Glass, Austin & Calvert Inc. is an equity, fixed-income and balanced manager.

Its equity approach is to identify securities undergoing a positive fundamental change that has been overlooked by the market.

Using interest rate anticipation and sector analysis, fixed-income investments are based primarily on yield curve and spread analysis; managers identify longer-term economic trends.

Clients include San Antonio Firemen and Policemen, and Luby's Cafeterias.

Edward M. Glass, president, is chief investment officer and client contact.

## The Glenmede Trust Co.

229 S. 18th St., Philadelphia, Pa. 19103; (215) 875-3200

| | |
|---|---|
| Total assets managed | $4,500,000,000 |
| Tax-exempt assets managed | $2,941,000,000 |
| Real estate assets managed | $550,000,000 |
| International assets managed | $55,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 30 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 7 |
| Size of research staff | 2 |

The Glenmede Trust Co. is an equity, fixed-income, balanced and international manager.

Its equity approach uses Graham & Dodd and quantitative analysis to identify low p/e stocks. It seeks equities with better-than-market financial characteristics with below-market multiples.

Its fixed-income approach uses sector analysis. It observes historic spreads to invest in maturities and sectors with the most opportunity.

Its use of options is limited.

The asset mix Jan. 1 was 53% stocks, 15% bonds, 20% mortgage-backed securities, 10% cash and 2% foreign equity.

Clients include Pew Memorial Trust, Pennsylvania State Teachers, Elwin Institute and Grove City College.

John W. Church Jr., senior vice president, is chief investment officer; Philip Young and Thomas Dunlevy are client contacts.

## Glickenhaus & Co.

6 E. 43rd St., New York, N.Y. 10017-4641; (212) 953-7800

| | |
|---|---|
| Total assets managed | $1,800,000,000 |
| Tax-exempt assets managed | $1,200,000,000 |
| 401(k)/457 assets managed | $10,000,000 |
| 401(k)/457 clients | 4 |
| Minimum separate account | $4,000,000 |
| Tax-exempt clients | 90 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 14 |
| Size of research staff | 4 |

Glickenhaus & Co. is an equity, fixed-income and balanced manager.

Its equity approach is very risk conscious, evaluating downside exposure against the opportunity for upside potential. A value-oriented, bottom-up approach to stock selection includes characteristics such as low p/es, high yield, low price-to-book ratios and low price-to-sales.

Its fixed-income approach uses interest rate anticipation, analyzing credit and maturity in relation to economic conditions. Its risk-conscious philosophy dictates investment in high-quality issues.

The asset mix Jan. 1 was 85% stocks, 10% cash and 5% convertible bonds.

The firm follows 100 stocks closely and 250, generally; 80% of research is generated internally.

Clients include New York State Teachers, Pennsylvania Employes, Xerox and Philip Morris.

Seth M. Glickenhaus, senior partner, is chief investment officer; Connie Moak Mazur, partner, is client contact.

## Gofen & Glossberg Inc.

401 N. Michigan Ave. Suite 3065, Chicago, Ill. 60611; (312) 828-1100

| | |
|---|---|
| Total assets managed | $4,750,000,000 |
| Tax-exempt assets managed | $400,000,000 |
| Minimum separate account | $750,000 |
| Tax-exempt clients | 145 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 8 |
| Size of research staff | 4 |

Gofen & Glossberg Inc. is an equity, fixed-income and balanced manager.

Its equity approach stresses a total return concept, using valuation techniques emphasizing the relationship of p/e ratios to anticipated growth rates.

Its fixed-income approach uses interest rate anticipation, seeking the maximum rate of return consistent with minimal volatility of principal values.

The asset mix Jan. 1 was 40% stocks, 50% bonds and 10% cash.

The firm follows 100 stocks closely and 500, generally; 30% of the research is generated internally.

Carl X. Elvove, president, is chief investment officer; Mark R. Goodman, assistant secretary and treasurer, is client contact.

## Goldman, Sachs & Co.

4900 Sears Tower, Chicago, Ill. 60606; (800) 621-2550

| | |
|---|---|
| Total assets managed | $14,190,000,000 |
| Tax-exempt assets managed | $1,162,000,000 |
| Tax-exempt clients | 405 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 3 |

Goldman, Sachs & Co., a fixed-income manager, uses interest rate anticipation, focusing on high-quality, high-income securities consistent with preservation of capital.

The asset mix Jan. 1 was 70% bonds and 30% commercial paper.

All research is generated internally.

Clients include Ameritech, Florida Power & Light, Harris Associates and Harris Trust.

Bob Giordano, partner, is chief investment officer. Prospective clients can contact the account administration desk at (312) 993-4400.

## Govaars and Associates

2280 University Drive, Newport Beach, Calif. 92660; (714) 650-0675

| | |
|---|---|
| Total assets managed | $3,700,000,000 |
| Tax-exempt assets managed | $13,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | C |
| No. of portfolio managers | 7 |
| Size of research staff | 2 |

Govaars and Associates, a fixed-income manager, attempts to add value by anticipating interest rate trends, rotating sectors, capturing volatility and assessing relative values. Using its expertise in the valuation of mortgage-backed securities, the firm monitors portfolio composition, weighted average life and effective duration to profit from the current and expected phases of the market cycle. Options and fixed-income futures are used.

William K. Mawhorter, executive vice president, is chief investment officer; Sid McCausland is client contact.

## Gradison & Co. Inc.

580 Walnut St., Cincinnati, Ohio 45202; (513) 579-5866

| | |
|---|---|
| Total assets managed | $155,000,000 |
| Tax-exempt assets managed | $89,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 71 |
| Types of accounts managed | CFJ |
| No. of portfolio managers | 3 |
| Size of research staff | 9 |

Gradison & Co. Inc. is an equity, fixed-income and balanced manager.

Its equity approach is growth- and value-oriented, using quantitative techniques. The approach is earnings driven and disciplined.

Its fixed-income approach is passive, using government and agency securities in staggered maturities.

Clients include Dugan & Meyers Construction and Cincinnati Museum of Natural History.

William J. Leugers Jr., executive vice president, is the chief investment officer; Alfred M. Brunner, vice president, is the client contact.

## Granahan Investment Management Inc.

303 Wyman St., Waltham, Mass. 02154; (617) 890-4412

| | |
|---|---|
| Total assets managed | $80,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $5,000,000 |
| No. of portfolio managers | 1 |
| Size of research staff | 2 |

Granahan Investment Management Inc., an equity manager, focuses on small, well-managed companies as well as under-researched specialty growth companies.

The firm follows 100 stocks closely and 200, generally; all research is generated internally.

John J. Granahan is chief investment officer; Jane M. White is client contact.

## Grantham, Mayo, Van Otterloo & Co. International

40 Rowes Wharf, Boston, Mass. 02110; (617) 330-7523

| | |
|---|---|
| Total assets managed | $1,857,000,000 |
| Tax-exempt assets managed | $1,857,000,000 |
| International assets managed | $1,857,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 33 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 5 |
| Size of research staff | 3 |

Grantham, Mayo, Van Otterloo & Co. International is an international equity manager.

Its International Quantitative Equities pool uses quantitative analytical screening techniques to achieve low-beta foreign equity exposure with a low p/e profile. Portfolio turnover averages less than 20% per year.

The asset mix Jan. 1 was 88% stocks, 1% bonds and 11% cash.

The firm follows 1,200 stocks closely and 3,000 generally.

The parent company is Grantham, Mayo, Van Otterloo & Co.

## Great-West Life Assurance

8505 E. Orchard Road, Englewood, Colo. 80111; (303) 889-3000

| | |
|---|---|
| Total assets managed | $15,524,000,000 |
| Tax-exempt assets managed: | |
| Total | $5,500,000,000 |
| Pooled accounts | $290,000,000 |
| GICs | $1,364,000,000 |
| Annuities | $515,000,000 |
| Other | $3,331,000,000 |
| 401(k)/457 assets managed | $1,263,000,000 |
| 401(k)/457 clients | 2,420 |
| Real estate assets managed | $17,000,000 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 7 |

Great-West Life Assurance Co. is an equity, fixed-income, balanced, real estate and GIC manager.

In equities, it uses both indexed and growth stock approaches. In fixed income, it uses interest rate anticipation, sector analysis and yield curve analysis. Mortgages represent a core holding, supplemented by an aggressively traded bond portfolio.

Both open- and closed-end funds are used for real estate accounts.

The separate account asset mix Jan. 1 was 89% stocks, 5% cash and 6% mortgages.

The insurer follows 125 stocks closely and 225, generally; 25% of research is generated internally.

Clients include American Dental Association, Halliburton and Manville.

The parent company is Power Corp. of Canada.

Marshall Smith, executive vice president-investments, is chief investment officer; Graham McDonald, vice president-group pension, is client contact.

## Greeley National Bank

Box 1098, Greeley, Colo. 80632; (303) 356-1234

| | |
|---|---|
| Total assets managed | $82,000,000 |
| Tax-exempt assets managed: | |
| Total | $44,000,000 |
| Commingled | $24,000,000 |
| Separate | $20,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 30 |
| Separate | 2 |
| Types of accounts managed | CFG |
| No. of portfolio managers | 1 |

Greeley National Bank is an equity, fixed-income and balanced manager.

Its equity approach varies depending on client risk tolerance. It uses growth stocks and sector rotation. Its fixed-income approach is passive or based on interest rate anticipation, depending on client risk tolerance.

The bank follows 85 stocks closely and 100, generally.

The parent company is Affiliated Banks of Colorado.

Don Taylor is senior investment officer; Mike Phillips is client contact.

**Key to abbreviations**

C: Corporate account
E: Educational endowments
F: Private foundations
G: U.S. state and local gov'ts
J: Jointly trusteed
P: Canadian provincial gov'ts
U: Unions (Canadian firms only)

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NIDS
National Investor Data Services, Inc.

## David J. Greene & Co.

30 Wall St., New York, N.Y. 10005; (212) 344-5180

| | |
|---|---|
| Total assets managed | $1,043,000,000 |
| Tax-exempt assets managed | $803,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 102 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 7 |
| Size of research staff | 11 |

David J. Greene & Co., an equity manager, invests in undervalued stocks at prices that do not reflect earnings power, cash flow and asset values, with particular emphasis on stocks fitting this description that are special situations.

The asset mix Jan. 1 was 70% stocks and 30% cash.

The firm follows 100 stocks closely and 300, generally; 97% of research is generated internally.

Clients include US WEST, CPC International, Time and FNMA.

Alan I. Greene, managing partner, is chief investment officer; Erwin A. Zeuschner, partner in charge of advisory department, is client contact.

## Greenleaf Capital Management

603 Tower East, Shaker Heights, Ohio 44122; (216) 752-8900

| | |
|---|---|
| Total assets managed | $410,000,000 |
| Tax-exempt assets managed | $340,000,000 |
| International assets managed | $10,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 90 |
| Types of accounts managed | CF |
| No. of portfolio managers | 7 |

Greenleaf Capital Management is an equity, fixed-income, balanced and international manager.

Its equity approach emphasizes inefficiently priced emerging growth and low p/e stocks.

Its fixed-income approach is passive. Interest rate anticipation is used to seek investment in intermediate high-quality bonds.

The firm follows 80 stocks closely and 50, generally; half the research is generated internally.

Geofrey J. Greenleaf is chief investment officer and client contact.

## Greenwich Asset Management

600 Steamboat Road, Greenwich, Conn. 06830; (203) 629-3711

| | |
|---|---|
| Total assets managed | $115,000,000 |
| Tax-exempt assets managed | $115,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

Greenwich Asset Management is a fixed-income and liability manager.

Its fixed-income approach is based on volatility management, seeking to protect against losses when interest rates rise and realize substantial capital appreciation during rallies. Portfolios consist of short-term instruments and calls on bonds.

The parent is Greenwich Capital Markets Inc.

The chief investment officer is Elliott R. Detchon III, president. The client contact is James C. Vogelzang of Vogelzang & Associates Inc., 600 17th St. Suite 2325S, Denver, Colo. 80202; (303) 629-1900.

## Griffin Capital Corp.

237 Park Ave. Suite 2100, New York, N.Y. 10017; (212) 551-1414

| | |
|---|---|
| Total assets managed | $36,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $2,000,000 |
| No. of portfolio managers | 2 |
| Size of research staff | 3 |

Griffin Capital Corp., a real estate manager, provides competitive long-term financing for companies by purchasing corporate real estate assets on a sale-leaseback basis.

Investment objectives are the preservation of capital, the creation of long-term passive premium yield income and capital appreciation through well-situated property holdings.

Property-specific investments are funded through a group of taxable corporations and with tax-exempt GIC or conventional mortgage financing.

Robert M.T. Jutson Jr., managing director, is chief investment officer and client contact.

## T.M. Griffing Associates Inc.

29 Broadway, New York, N.Y. 10006; (212) 422-8620

| | |
|---|---|
| Total assets managed | $8,000,000 |
| Tax-exempt assets managed | $2,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 4 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

T.M. Griffing Associates Inc. is an equity, fixed-income and balanced manager.

Its value-oriented equity approach uses sector rotation, emphasizing low p/e and growth stocks. Options are used.

Its fixed-income approach incorporates interest rate anticipation and sector analysis.

The firm follows 10 to 20 stocks closely and 20 to 40, generally; more than 75% of the research is generated internally.

Thomas M. Griffing is chief investment officer; Mr. Griffing and F. Lewis Carlisle are client contacts.

## Grigsby, Brandford Capital Management Division

40 Clinton St., Newark, N.J. 07102; (201) 621-8920

| | |
|---|---|
| Total assets managed | $10,000,000 |
| Tax-exempt assets managed | $5,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 1 |
| Types of accounts managed | E |
| No. of portfolio managers | 1 |
| Size of research staff | 3 |

Grigsby, Brandford Capital Management Division is an equity, fixed-income, balanced and GIC manager.

Its value-oriented equity approach uses low p/e stocks and Graham & Dodd analysis, investing early and waiting for values to emerge based on fundamental corporate strengths. Its fixed-income approach uses sector analysis.

The parent company is Grigsby, Brandford & Co. Inc.

Albert A. Sturdivant, executive vice president, is chief investment officer and client contact.

## Grubb & Ellis Realty Advisers

1 Montgomery-Telesis Tower, San Francisco, Calif. 94104; (415) 956-1990

| | |
|---|---|
| Total assets managed | $620,000,000 |
| Tax-exempt assets managed | $295,000,000 |
| Real estate assets managed | $295,000,000 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 3 |
| Types of accounts managed | CG |
| No. of portfolio managers | 8 |
| Size of research staff | 2 |

Grubb & Ellis Realty Advisers is a real estate manager with a research-oriented approach.

The firm concentrates on markets that demonstrate above-average growth with sufficient market depth to ensure liquidity and business diversification to minimize exposure to single industries.

The firm focuses on development, redevelopment, renovation and releasing of undermanaged and underused properties.

The parent is Grubb & Ellis Co.

Clients include Kern County Employees and University of California.

James R. Proud, president, is chief investment officer; James A. Cote is client contact.

## Gryphon Investment Counsel Inc.

2000 Peel St. Suite 710, Montreal, Quebec H3A 2W5; (514) 288-4122

| | |
|---|---|
| Total assets managed | $2,482,000,000 |
| Tax-exempt assets managed: | |
| Total | $2,482,000,000 |
| For subsidiaries of U.S. firms | $422,000,000 |
| Tax-exempt clients | 65 |
| U.S. subsidiaries | 12 |
| Types of accounts managed | CEFGU |
| No. of portfolio managers | 6 |
| Size of research staff | 2 |

Gryphon Investment Counsel Inc., a Canadian firm, is an equity, fixed-in-


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LINCOLN NATIONAL PENSION COMPANY

come and balanced manager.

Its equity approach uses sector rotation, market timing and fundamental analysis. Stock selection within sectors is dependent on in-house research.

Its fixed-income approach emphasizes active interest rate timing, with goals of preservation and enhancement of capital. Concentration is in high-quality marketable bonds and cash, when appropriate.

The asset mix Jan. 1 was 47% Canadian stocks, 6% U.S. stocks, 36% bonds and 11% cash.

It follows 200 stocks closely and 400, generally; 60% of research is generated internally.

George B. Kiddell, president and managing partner, is chief investment officer; Ronald E.F. Kaulbach, managing partner, is client contact.

## G.T. Capital Management

50 California St., 27th Floor, San Francisco, Calif. 94111; (415) 445-7505

| | |
|---|---|
| Total assets managed | $1,200,000,000 |
| Tax-exempt assets managed | $776,000,000 |
| International assets managed | $737,000,000 |
| Minimum separate account | $15,000,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | CEJ |
| No. of portfolio managers | 31 |
| Size of research staff | 16 |

G.T. Capital Management Inc. is an equity, foreign fixed-income, balanced and international manager.

Its equity approach emphasizes early identification of major international trends, targeting appropriate countries and companies through which to exploit such trends. It seeks growth companies with undiscounted earnings acceleration.

Its fixed-income approach focuses on currency management, emphasizing flexible maturity rates.

Options and stock index futures are used.

The asset mix Jan. 1 was 95% stocks and 5% cash. As of the same date, the firm had $737 million in foreign stocks.

The parent company is G.T. Management PLC.

Robert J. Boyd is chief investment officer; Mary Lou Bernhoft, vice president-marketing and client services, is client contact.

## Guardian Timing Services

74 Victoria St. Third Floor, Toronto, Ontario M5C 2A5; (416) 863-1100

| | |
|---|---|
| Total assets managed | $8,000,000 |
| Tax-exempt assets managed | $1,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 1 |
| No. of portfolio managers | 1 |

Guardian Timing Services, a Canadian firm, is an equity and fixed-income manager.

Its equity approach uses market timing; its fixed-income approach uses market timing, plus short-term or long-term securities.

Jean-Pierre Fruchet, president, is chief investment officer and client contact.

## Guildcor Financial Inc.

701 B St. Suite 2255, San Diego, Calif. 92101; (619) 235-0031

| | |
|---|---|
| Total assets managed | $3,000,000 |
| Tax-exempt assets managed | $3,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |

Guildcor Financial Inc. is an equity, fixed-income and balanced manager.

Its investment approach is based on tactical asset allocation. Its monetary composite identifies the primary trend; momentum analysis quantifies the intermediate trend. When both are positive, assets are invested based on a mutual fund asset allocation model.

All research is generated internally.

John Davis is chief investment officer; E. James Welsh is client contact.

## Guild Investment Management Inc.

23410 Civic Center Way, Suite E-10, Malibu, Calif. 90265; (213) 456-1626

| | |
|---|---|
| Total assets managed | $70,000,000 |
| Tax-exempt assets managed | $20,000,000 |
| International assets managed | $15,000,000 |
| Minimum separate account | $300,000 |
| Tax-exempt clients | 15 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

Guild Investment Management Inc. is an equity and international manager.

Its investment approach is based on a global macroeconomic view, with assets allocated to those sectors (industries or stocks, domestic and international) with the greatest earnings and price momentum.

The firm follows 50 stocks closely and 250, generally; 40% of the research is generated internally.

Montague Guild Jr. is the chief investment officer; Allen Teague is the client contact.

## Gulf Investment Management Inc.

580 Westlake Park Blvd. Suite 1120, Houston, Texas 77079; (713) 493-5887

| | |
|---|---|
| Total assets managed | $248,000,000 |
| Tax-exempt assets managed | $192,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 31 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 3 |

Gulf Investment Management Inc., an equity and balanced manager, emphasizes low p/e stocks in a fundamental and disciplined analysis with preference for out-of-favor or overlooked securities. Two investment disciplines underlie its buy/sell decisions.

The firm follows 30 stocks closely and 250, generally; 50% of the research is generated internally.

Clients include Houston Firemen, Texas New Mexico Power and BASF.

Thomas Macrini, president, is chief investment officer; T. Charles Toomey, vice president, is client contact.

Master trust: Aug. 22.

# H

## R.B. Haave Associates Inc.

595 Madison Ave., New York, N.Y. 10022; (212) 980-6682

| | |
|---|---|
| Total assets managed | $32,000,000 |
| Tax-exempt assets managed | $32,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

R.B. Haave Associates Inc., an equity manager, targets undervalued stocks in relatively undervalued industries before positive changes in economic trends. It uses Graham & Dodd analysis and sector rotation, and emphasizes corporate cash flow and research and development.

The firm follows 30 stocks closely and the market generally; all research is generated internally.

Clients are Agway and Champion Spark Plug.

Ronald B. Haave, president, is chief investment officer and client contact.

## Hagler, Mastrovita & Hewitt

1 International Place, Suite 3190, Boston, Mass. 02110; (617) 439-0440

| | |
|---|---|
| Total assets managed | $1,430,000,000 |
| Tax-exempt assets managed | $1,430,000,000 |
| 401(k)/457 assets managed | $117,000,000 |
| 401(k)/457 clients | 1 |
| International assets managed | $18,000,000 |
| Minimum separate account | $50,000,000 |
| Tax-exempt clients | 21 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 3 |

Hagler, Mastrovita & Hewitt Inc. is an equity, fixed-income and balanced manager.

Its equity approach identifies value, concentrating on major decision and careful attention to risk management.

Its fixed-income approach is focused on quality and maturity decisions, comparing expected returns and risks across the market spectrum.

The asset mix Jan. 1 was 69% stocks, 11% bonds and 20% cash; $18 million was in foreign stocks.

It follows 75 stocks closely and 150 generally; 30% of research is generated internally.

The parent company is United Asset Management.

Clients include Ford Foundation, Abbott Labs and Williams College.

Robert P. Mastrovita, president, is chief investment officer; Jon L. Hagler, chairman, is client contact.

## Hahn Holland & Grossman

180 N. Wacker Drive, Suite 350, Chicago, Ill. 60606; (312) 984-3580

| | |
|---|---|
| Total assets managed | $932,000,000 |
| Tax-exempt assets managed | $821,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 45 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 3 |
| Size of research staff | 5 |

Hahn Holland & Grossman is an equity, fixed-income and balanced manager.

Its equity approach emphasizes conserving capital in falling markets. The firm uses a top-down method concentrating on evaluation of market direction, identification of attractive industries and large-cap, value-oriented stocks. Stock index futures are used.

Its fixed-income approach is passive, using interest rate forecasts to structure portfolios with long, intermediate or short obligations from government or AAA corporate securities depending on yield spreads.

The asset mix Jan. 1 was 60% stocks, 15% bonds and 25% cash.

The firm follows 50 stocks closely; 80% of research is generated internally.

Clients include University of Minnesota, Chicago Laborers and Chrysler.

Donald Hahn is chief investment officer; Kenneth Grossman is client contact.

## Hallmark Capital Management Inc.

1 Exchange Plaza, New York, N.Y. 10006; (212) 363-4480

| | |
|---|---|
| Total assets managed | $84,000,000 |
| Tax-exempt assets managed | $70,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 23 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Hallmark Capital Management, acquired by the Prudential Asset Management Group in February, is an equity and balanced manager.

Its equity approach uses Graham & Dodd principles, stressing value established by the use of a fundamental valuation model and confirmed by traditional fundamental research. The mix of fixed income and cash equivalent holdings is based on interest rate anticipation. Portfolio composition is conservative and risk averse.

The asset mix Jan. 1 was 31% stocks, 52% bonds and 17% cash.

The parent company is Prudential Insurance Co. of America.

Robert L. Ardizzone is the chief investment officer; Peter S. Hagerman is the client contact.

## Hambrecht & Quist Equity Management

235 Montgomery St., San Francisco, Calif. 94104; (415) 986-5115

| | |
|---|---|
| Total assets managed | $30,000,000 |
| Tax-exempt assets managed | $20,000,000 |
| Minimum separate account | $300,000 |
| Tax-exempt clients | 4 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

Hambrecht & Quist Equity Management, an equity and balanced manager, offers emerging growth portfolios. It focuses on small-cap, undervalued stocks using both quantitative and qualitative measures.

The firm follows 250 stocks closely and 1,000 generally; 50% of the research is generated internally.

The parent is Hambrecht & Quist Group.

Clients include Carnegie Mellon University endowment and Equifax.

Michael T. Jackson is chief investment officer; Eric L. Munson, vice president, is client contact.

## John Hancock Financial Services

P.O. Box 111, Boston, Mass. 02117; (617) 421-6294

| | |
|---|---|
| Total assets managed | $40,868,000,000 |
| Tax-exempt assets managed: | |
| Total | $15,070,000,000 |
| Pooled accounts | $1,330,000,000 |
| Separate accounts | $881,000,000 |
| GICs | $6,944,000,000 |
| Annuities | $1,509,000,000 |
| Other | $4,626,000,000 |
| Real estate assets managed | $1,026,000,000 |
| Indexed assets managed | $12,000,000 |
| Tax-exempt clients | 174 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 19 |
| Size of research staff | 27 |

John Hancock Financial Services is a real estate, international, GIC, timber, venture capital, private placements and convertibles manager.

Its equity and fixed-income investments are handled through Independence Investment Associates, which is profiled elsewhere in this issue. Fixed-income futures are used.

For real estate, it offers a full range of equity-oriented investments, including pooled and non-pooled accounts, joint ventures and direct investments in commercial real estate and timber.

The separate account asset mix Jan. 1 was 17% bonds, 4% cash, 51% equity real estate, 0.5% mortgages and 27.5% other; $11.5 million was invested in equity index funds.

Its clients include Eastman Kodak, Honeywell and Hughes Aircraft.

Foster L Aborn, president-investments and pension sector, is chief investment officer; George F. Miller, senior vice president-investment marketing, is client contact.

## Hanseatic-American Group

341 Madison Ave., 17th Floor, New York, N.Y. 10017; (212) 599-3003

| | |
|---|---|
| Total assets managed | $130,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $4,000,000 |
| No. of portfolio managers | 5 |
| Size of research staff | 3 |

Hanseatic-American Group Inc. is an equity and balanced manager.

Its equity approach combines solid fundamental analysis and quantitative hedging disciplines to control market risk. It focuses on growth and emerging growth stocks using market timing and sector rotation. Options, stock index futures and fixed-income futures are used. Its total-return approach to fixed income combines interest rate anticipation and sector analysis.

The parent companies are Hanseatic Corp. and American Asset Management Co.

Philip G. Putnam, chief executive officer, is chief investment officer; George A. Kolodka, vice president, is client contact.

## Hanson Investment Management Co.

4000 Civic Center Drive, San Rafael, Calif. 94903; (415) 499-1400

| | |
|---|---|
| Total assets managed | $804,000,000 |
| Tax-exempt assets managed | $499,000,000 |
| Real estate assets managed | 7,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 25 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 5 |
| Size of research staff | 1 |

Hanson Investment Management Co. is an equity and balanced manager.

It uses Graham & Dodd principles and emphasizes low p/e stocks in its value-oriented, bottom-up approach.

Its fixed-income approach uses interest rate anticipation.

The firm follows 35 stocks closely and 60 generally; 50% of research is generated internally.

The parent company is United Asset Management.

Clients include Hawaii, City and County of San Francisco, McKesson and Miami.

Herbert M. Hanson Jr. is chief investment officer and client contact.

## Harbor Capital Management

265 Franklin St., Suite 1800, Boston, Mass. 02110; (617) 439-4500

| | |
|---|---|
| Total assets managed | $1,573,000,000 |
| Tax-exempt assets managed | $1,160,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 70 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 7 |
| Size of research staff | 5 |

Harbor Capital Management Co. Inc. is an equity, fixed-income and balanced manager.

Its equity approach emphasizes growth and low p/e stocks, using a disciplined, "bond-competitive" decision-making process and strong fundamental research.

Its fixed-income approach is conservative, stressing a real rate of return using fundamental economic and interest rate analysis.

The asset mix Jan. 1 was 48% stocks, 42% bonds and 10% cash.

The firm follows 150 stocks closely


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| • EXECUTIVE COMPENSATON? | ✓ | |
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| • NORTHERN IRELAND? | ✓ | |

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contact: David C. Popper
1755 Massachusetts Ave., N.W.
Washington, D.C. 20036
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and 300, generally; 75% of the research is generated internally.

Clients include U.S. Military Academy, City of Detroit, Woods Hole Oceanographic Institute and BIC.

Frederick G. P. Thorne is chief investment officer; E. William Hansen is client contact.

### Harris Associates L.P.

2 N. LaSalle St., Chicago, Ill. 60602; (312) 621-0612

| | |
|---|---|
| Total assets managed | $2,629,000,000 |
| Tax-exempt assets managed | $1,135,000,000 |
| International assets managed | 87,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 156 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 7 |
| Size of research staff | 9 |

Harris Associates L.P., an equity and balanced manager, takes a value-oriented approach that produces portfolios with p/e and price/book ratios less than market; yield and ROE greater than market; and positive-low volatility rate of return. Its fixed-income approach is passive.

The asset mix Jan. 1 was 59% stocks, 12% bonds and 29% cash; $87 million was in foreign stocks.

The firm follows 150 stocks closely and 400 to 500 generally; 50% of research is generated internally.

Clients include Federated Department Stores, Texaco, Budd and Dean Foods.

Myron R. Szold is the chief investment officer; Earl J. Rusnak Jr. is the client contact.

### Harris Bretall Sullivan & Smith Inc.

1 Post St., Suite 2300, San Francisco, Calif. 94104; (415) 391-8040

| | |
|---|---|
| Total assets managed | $400,000,000 |
| Tax-exempt assets managed | $300,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 15 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 5 |
| Size of research staff | 10 |

Harris Bretall Sullivan & Smith Inc. is an equity, fixed-income and balanced manager.

Its equity approach combines a disciplined selection process, focusing on growth stock, with tactical asset allocation. Its fixed-income approach uses interest rate anticipation and active yield curve analysis; Treasuries are purchased.

The firm follows 220 stocks closely and 500 generally; 75% of research is generated internally.

Clients include Alameda County and Asian Development Bank.

Jack Sullivan is client contact.

### Harris, Greenhouse, Kutzel

56 Beaver St., New York, N.Y. 10004; (212) 514-9800

| | |
|---|---|
| Total assets managed | $600,000,000 |
| Tax-exempt assets managed | $600,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 50 |
| Types of accounts managed | CJG |
| No. of portfolio managers | 5 |

Harris, Greenhouse, Kutzel Inc. is an equity, fixed-income and balanced manager.

Following its value-oriented equity approach, the firm buys out-of-favor issues that offer above-average growth potential, with the major impact based on the stock's historical position in the market vs. the economic cycle.

Its fixed-income approach is based on interest rate anticipation, with a maturity schedule of six years or less; the firm trades actively along the curve.

The asset mix Jan. 1 was 45% stocks, 45% bonds and 10% cash.

The firm follows 150 stocks closely and 250 generally; 50% of the research is generated internally.

Clients include Western Pennsylvania Teamsters and City of Pittsburgh.

Warren Greenhouse is chief investment officer; Joseph Kutzel, managing director, is client contact.

### Harris Trust and Savings Bank

P.O. Box 755, 190 LaSalle St., Chicago, Ill. 60690; (312) 461-2121

| | |
|---|---|
| Total assets managed | $14,293,000,000 |
| Tax-exempt assets managed: | |
| Total | $8,703,000,000 |
| Commingled | $3,061,000,000 |
| Separate | $5,732,000,000 |
| 401(k)/457 assets managed | $140,000,000 |
| 401(k)/457 clients | 90 |
| Real estate assets managed | $280,000,000 |
| International assets managed | $18,000,000 |
| Indexed assets managed | $446,000,000 |
| Dedicated assets managed | $341,000,000 |
| Tax-exempt clients: | |
| Commingled | 450 |
| Separate | 261 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 12 |
| Size of research staff | 8 |

Harris Trust and Savings Bank is an equity, fixed-income, balanced, real estate, international equity, convertible securities, stock index and futures/options manager.

Its equity approach incorporates a five-factor model: low p/e; dividend discount; earnings momentum; earnings estimate change; and price momentum. Stocks are then ranked by a process that weights each model to its predictive power.

Its fixed-income approach uses a structured decision-making process reliant on quantitative models to establish exposure in duration, term structure and sector/quality. Options and financial futures are used.

Real estate investments are equity oriented and made in unleveraged industrial, retail and office properties in the $1 million to $3 million range.

The asset mix Jan. 1 was 27% stocks, 31% bonds, 40% cash, 1% equity real estate and 1% mortgage-backed securities.

The parent is Bank of Montreal.

John C. Kirscher, senior vice president, is chief investment officer; Robert E. Vanden Bosch, senior vice president, is client contact.

### Hartford Life Insurance Co.

P.O. Box 2999, Hartford, Conn.; 06104-2999; (203) 683-8001

| | |
|---|---|
| Total assets managed | $4,000,000,000 |
| Tax-exempt assets managed: | |
| Total | $3,336,000,000 |
| Pooled accounts | $819,000,000 |
| Separate accounts | $428,000,000 |
| GICs | $1,089,000,000 |
| Other | $1,000,000,000 |
| 401(k)/457 assets managed | $1,000,000,000 |
| Real estate assets managed | $32,000,000 |
| Minimum separate account | $5,000,000 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 6 |
| Size of research staff | 12 |

Hartford Life Insurance Co. is an equity, fixed-income, balanced, real estate, GIC and mortgage-backed securities manager.

Its equity approach emphasizes Graham & Dodd analysis, with optional structuring by sector and industry.

Its fixed-income approach anticipates the level and shape of the yield curve to offer clients a high return with principal value guaranteed.

Options and fixed-income futures are used.

Its real estate approach is to acquire properties offering attractive yields and long-term appreciation. Emphasis is on site selection and asset and property management.

The separate account asset mix Jan. 1 was 91% stocks, 1.2% cash, 1.5% equity real estate, 1% mortgage-backed securities and 5.3% money markets.

The parent company is ITT.

Edward N. Bennett, senior vice president, is chief investment officer; Charles A. Clinton, assistant vice president, is client contact.

### Haven Capital Management

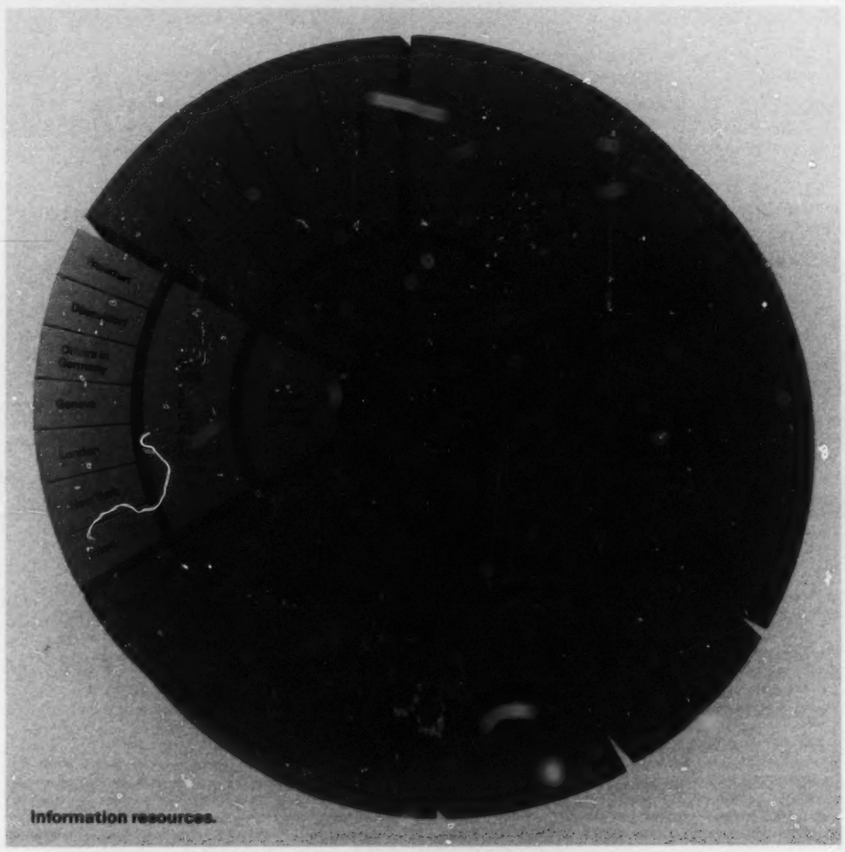
605 Third Ave., 27th Floor, New York, N.Y. 10158; (212) 953-2322

| | |
|---|---|
| Total assets managed | $557,000,000 |
| Tax-exempt assets managed | $350,000,000 |
| Real estate assets managed | 27,000,000 |
| International assets managed | 2,000,000 |
| Dedicated funds managed | 10,000,000 |
| Tax-exempt clients | 27 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 5 |

Haven Capital Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach is growth at a reasonable price, based on individual issue selection of undervalued companies. Historical data is examined to


# Interest rate sensitive.

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identify attractively priced companies with above-average characteristics.

Its fixed-income approach is based on interest rate anticipation derived from economic cycle analysis. Maturity selection is followed by sector and quality judgments to produce consistent competitive returns with low volatility.

The firm follows 75 to 100 stocks closely and 200 generally; 40% of the research is generated internally.

Clients include Pennsylvania Power & Light, Diebold, Cox Enterprises and Dr. Scholl Foundation.

Denis M. Turko, managing director, is the client contact.

## Hawaiian Trust Co. Ltd.

P.O. Box 3170, Honolulu, Hawaii 96802; (808) 538-4622

| | |
|---|---|
| Total assets managed | $4,608,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,000,000,000 |
| Commingled | $163,000,000 |
| Separate | $837,000,000 |
| 401(k)/457 assets managed | $60,000,000 |
| 401(k)/457 clients | 52 |
| Real estate assets managed | $8,000,000 |
| International assets managed | $10,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients: | |
| Commingled | 615 |
| Separate | 23 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 11 |
| Size of research staff | 2 |

Hawaiian Trust Co. Ltd. is an equity, fixed-income, balanced and real estate manager.

Its equity approach emphasizes growth stocks; earnings momentum/surprises are weighted.

In fixed income, it invests in Treasury bonds. Changes in maturity and duration are based on interest rate outlook.

The asset mix Jan. 1 was 50% stocks, 40% bonds, 5% cash and 5% equity real estate; $10 million was in foreign stocks.

The bank follows 200 stocks closely and 1,000 generally.

Clients include Hawaii Stevedores, Star Markets, Pamcah UA Local 675 and Finance Factors.

The parent is Bancorp Hawaii.

William J. Barton Jr., senior vice president, is chief investment officer; Reid Smith, investment officer, is client contact.

## Hayden, Tolzmann & Associates Inc.

693 Bloomfield Ave., P.O. Drawer 708, Bloomfield, Conn. 06002-0708; (203) 243-1481

| | |
|---|---|
| Total assets managed | $52,000,000 |
| Tax-exempt assets managed | $52,000,000 |
| Real estate assets managed | 52,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | CG |

Hayden, Tolzmann & Associates Inc., a real estate manager, stresses acquisition of existing, leased, income-producing real estate — leveraged and unleveraged — such as mixed-use, research and development, office, industrial and retail properties nationwide.

The parent company is CenterBanc Financial Services Inc.

Clients include New Hampshire Retirement System and Reynolds Metals.

David C. Tolzmann, president, is chief investment officer and client contact.

## Heartland Capital Management Inc.

36 S. Pennsylvania St., Suite 610, Indianapolis, Ind. 46204; (317) 633-4080

| | |
|---|---|
| Total assets managed | $256,000,000 |
| Tax-exempt assets managed | $178,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 63 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 4 |

Heartland Capital Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses market timing and asset allocation consistent with the primary market trend. Stock selection emphasizes consistent growth with accelerating earnings per share.

Its fixed-income approach uses interest rate anticipation.

Clients include Ball, Indiana Gas, Hanover College and Indiana Pacers.

Barry F. Ebert and Robert D. Markley are the chief investment officers and the client contacts.

## Heilweil Hollander & Jacobs

400 Perimeter Center Terraces, Suite 190, Atlanta, Ga. 30346; (404) 393-8725

| | |
|---|---|
| Total assets managed | $92,000,000 |
| Tax-exempt assets managed | $29,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 69 |
| Types of accounts managed | CF |
| No. of portfolio managers | 3 |

Heilweil Hollander & Jacobs Inc. is an equity, fixed-income and balanced manager.

The firm takes a defensive value approach, concentrating on capital preservation and appreciation. Investments are made when prospects for further price deterioration seem minimal and strong potential exists for significant appreciation in two to three years.

In fixed income, both external events and market psychology are used in interest rate determination. Credit analysis focuses on underrated issues.

Marc S. Heilweil is chief investment officer; Brenda Dorrien is client contact.

## Heitman Advisory Corp.

180 N. LaSalle St., Suite 3600, Chicago, Ill. 60614; (312) 855-5700

| | |
|---|---|
| Total assets managed | $4,300,000,000 |
| Tax-exempt assets managed | $3,665,000,000 |
| Real estate assets managed | 3,665,000,000 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 49 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 13 |
| Size of research staff | 22 |

Heitman Advisory Corp., a real estate manager, stresses selection and acquisition of existing, investment-quality, well-rented properties, including office buildings, shopping centers and industrial parks. This provides the potential for increased cash return on investments with limited risk. Property management and leasing is handled through an affiliate, Heitman Properties.

All tax-exempt assets Jan. 1 were in equity real estate.

The parent company is Heitman Financial Ltd.

Clients include AT&T, Shell Oil, Alaska Permanent Fund and Southwestern Bell.

Norman Perlmutter, chief executive officer, is chief investment officer; David Glickman, president, is client contact.

## Hellman, Jordan Management Co. Inc.

50 Milk St., Boston, Mass. 02109; (617) 482-1777

| | |
|---|---|
| Total assets managed | $1,042,000,000 |
| Tax-exempt assets managed | $929,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 29 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

Hellman, Jordan Management Co. Inc., an equity manager, seeks sectors exhibiting the highest rates of estimated earnings growth throughout a stock market and economic cycle with strong emphasis on market timing. Options and stock index futures are used.

The asset mix Jan. 1 was 75% stocks, 13% bonds and 12% cash.

The firm follows 70 stocks closely and 200, generally; 40% of the research is generated internally.

The parent company is United Asset Management.

Clients include Xerox, Kimberly-Clark, Batus and Sun.

Gerald R. Jordan Jr. is the chief investment officer; Martin M. Hale is the client contact.

## Henderson Administration Group

3 Finsbury Ave., London EC2M 2PA, U.K. 01-638-5757

| | |
|---|---|
| Total assets managed | $13,000,000,000 |
| Tax-exempt assets managed | $8,000,000 |
| International assets managed | $8,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 1 |
| Types of accounts managed | G |
| No. of portfolio managers | 4 |

Henderson Administration Group, an international equity manager, uses a top-down approach to active country weighting. Stock selection focuses on earnings momentum leading to either higher growth stocks or cyclical issues when appropriate. Options and stock index futures are used.

The firm follows 500 stocks closely and 1,525, generally.

Ben Wrey is chief investment officer; Geoff Owen, senior vice president, and Andrew Jardine, vice president, are the client contacts in New York at (212) 315-5660.

## Hibernia National Bank

P.O. Box 61540, New Orleans, La. 70161; (504) 586-5542

| | |
|---|---|
| Total assets managed | $2,865,000,000 |
| Tax-exempt assets managed: | |
| Total | $2,323,000,000 |
| Commingled | $332,000,000 |
| Separate | $2,091,000,000 |
| 401(k)/457 assets managed | $190,000,000 |
| 401(k)/457 clients | 30 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients: | |
| Commingled | 410 |
| Separate | 42 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 9 |
| Size of research staff | 3 |

Hibernia National Bank is an equity, fixed-income and balanced manager.

Its equity approach uses sector rotation and market timing. Primary emphasis is placed on equity exposure and industry weighting as determined by the economic forecast. Options are used. Its fixed-income approach is based on inflation and interest rate forecasts. Credit analysis is used to minimize risk of quality deterioration and swaps are undertaken to improve yield without sacrificing quality and tradeability.

The asset mix Jan. 1 was 17% stocks, 59% bonds and 24% cash.

The bank follows 120 stocks closely and 250, generally; 25% of research is generated internally.

Clients include Amtrak, City of Fort Worth, Alton Ochsner Medical Foundation, Armtek and ODECO.

The parent is Hibernia Corp.

Robert L. Rust, vice president and trust investment officer, is chief investment officer; William J. Kearney III, vice president and trust officer, is client contact.

## Hickey Capital Management

208 S. LaSalle St. Suite 1602, Chicago, Ill. 60604; (312) 899-0150

| | |
|---|---|
| Total assets managed | $140,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $5,000,000 |
| No. of portfolio managers | 10 |

Hickey Capital Management Inc., a fixed-income manager, uses interest rate anticipation and specializes in U.S. government securities. Its uses financial futures and options to limit risk and employs repurchase agreement transactions and arbitrage trading techniques.

M. Joseph Hickey Jr. is chief investment officer and client contact.

## Hilliard Lyons Investment Management Group

P.O. Box 32760, Louisville, Ky. 40232; (502) 588-8400

| | |
|---|---|
| Total assets managed | $837,000,000 |
| Tax-exempt assets managed | $260,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 71 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 8 |
| Size of research staff | 1 |

Hilliard Lyons Investment Management Group is an equity, fixed-income and balanced manager.

Its equity approach uses Graham & Dodd analysis to concentrate on growth stocks. Emphasis is placed on internally generated research aimed at long-term opportunities. Low turnover is a characteristic of its primarily bottom-up methodology.

Its fixed-income approach emphasizes low interest rate and credit risk, aiming for positive return in all periods.

The firm follows 100 stocks closely and 600, generally; 35% of research is generated internally.

Clients include Figgie International, Kentucky Judicial Retirement Fund and Union College.

Donald F. Kohler, executive vice president, is the chief investment officer; Gordon L. Ragan, vice president, is the client contact.

## Hodges Capital Management

755 West End Ave., New York, N.Y. 10025; (212) 866-5334

| | |
|---|---|
| Total assets managed | $26,000,000 |
| Tax-exempt assets managed | $23,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | CF |
| No. of portfolio managers | 1 |

Hodges Capital Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach is low p/e, seeking promising low-multiple stocks off the beaten paths.

Its fixed-income approach is passive, purchasing a sequence of short-term maturities. The ladder has ascending maturities out to three years.

The firm follows 50 stocks closely and 100, generally; 50% of the research is generated internally.

Clients include Everest & Jennings and Christian Church.

Fletcher Hodges III is chief investment officer and client contact.

### 25 largest managers ranked by mortgage assets

| Firm | $ millions |
|---|---|
| Equitable Real Estate | 5,013 |
| Aetna Life | 1,128 |
| J.P. Morgan | 1,043 |
| Washington Square | 1,024 |
| Eastdil Realty | 1,011 |
| McMorgan | 780 |
| Standish, Ayer & Wood | 760 |
| F.I.A. Associates | 539 |
| Transamerica Investment | 528 |
| Latimer & Buck | 500 |
| Mitchell Hutchins Inst'l | 423 |
| GE Investments | 400 |
| Union Labor Life | 392 |
| L.J. Melody | 361 |
| Wells Fargo Realty | 346 |
| Bear Stearns | 297 |
| Mellon Real Estate | 278 |
| August-Am Cal | 270 |
| MIG Realty | 248 |
| Prudential Asset | 245 |
| Sovran Capital | 230 |
| Lomas & Nettleton | 224 |
| Valley Nat'l/Ariz. | 219 |
| General American Life | 186 |
| Trinity Advisors | 159 |
| **Total** | **16,604** |

## Hoisington Investment Management Co.

950 Echo Lane, Suite 210, Houston, Texas 77024; (713) 467-7900

| | |
|---|---|
| Total assets managed | $635,000,000 |
| Tax-exempt assets managed | $635,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 17 |
| Types of accounts managed | CFG |
| No. of portfolio managers | 2 |

Hoisington Investment Management Co., a fixed-income manager, uses a risk-averse, market-timing approach. Very short maturities are used during periods of high risk, while 30-year maturities capitalize on low-risk periods.

All tax-exempt assets Jan. 1 were in cash; long Treasuries were used in the first and fourth quarters of 1987.

Clients include TRW, 3M, Sara Lee and Unocal.

Van R. Hoisington, president, is chief investment officer; Janice Teague Green, senior vice president, is client contact.

## Home Capital Services Inc.

59 Maiden Lane, 21st Floor, New York, N.Y. 10038; (212) 530-6016

| | |
|---|---|
| Total assets managed | $4,000,000,000 |
| Tax-exempt assets managed | $24,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 3 |
| Types of accounts managed | C |
| No. of portfolio managers | 5 |
| Size of research staff | 2 |

Home Capital Services Inc. is an equity, fixed-income and balanced manager.

Its equity approach is quantitative and uses a proprietary valuation model to select undervalued securities that show evidence of positive earnings momentum. Its fixed-income approach emphasizes sector analysis, combining high-yield portfolios with investment-grade corporate bonds and government obligations.

The parent is Home Group Inc.

Hiram F. Moody Jr. is chief investment officer; Erich G. Weissenberger Jr., director of marketing/client services, is the client contact.

## Home Life Insurance Co.

75 Wall St., New York, N.Y. 10005; (212) 428-2000

| | |
|---|---|
| Total assets managed | $3,542,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,278,000,000 |
| Pooled accounts | $19,000,000 |
| GICs | $719,000,000 |
| Annuities | $9,000,000 |
| Other | $531,000,000 |
| Tax-exempt clients | 1,000 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 3 |

Home Life Insurance Co. is an equity, fixed-income and balanced manager.

Its fixed-income approach uses a seven-year laddered portfolio with emphasis on preservation of principal.

In addition to the above assets, $30 million in pooled separate equity accounts is managed for Home Life Insurance by First Manhattan Capital Management.

The separate account asset mix Jan. 1 was 70% stocks and 30% bonds.

The insurer follows 200 stocks closely.

The parent company is Home Life Financial Resources.

John A. Fabian, senior vice president, is chief investment officer; John F. Hannan, vice president, is client contact at (201) 980-4402.

## Horgan Tattersall Investment Counsel Ltd.

Suite 1904 P.O. Box 95, The Cadillac Fairview Tower, 20 Queen St. W., Toronto, Ontario M5H 3R3; (416) 979-1818

| | |
|---|---|
| Total assets managed | $50,000,000 |
| Tax-exempt assets managed: | |
| Total | $13,000,000 |
| For subsidiaries of U.S. firms | $0 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |

Horgan Tattersall Investment Counsel Ltd., a Canadian firm, is an equity, fixed-income, balanced, small-cap Canadian and international manager.

Its equity approach is value oriented without a dogmatic adherence to any approach. Its fixed-income approach uses interest rate anticipation, concentrating portfolios in the highest quality issues to permit rapid implementation of strategy changes.

Patrick S. Horgan is chief investment officer; Mr. Horgan and Robert Tattersall, vice president, are client contacts.

## Hotchkis and Wiley

800 W. Sixth St. Suite 540, Los Angeles, Calif. 90017-2708; (213) 623-4073

| | |
|---|---|
| Total assets managed | $2,432,000,000 |
| Tax-exempt assets managed | $2,406,000,000 |
| Minimum separate account | $30,000,000 |
| Tax-exempt clients | 27 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 3 |

Hotchkis and Wiley, an equity and balanced manager, uses Graham & Dodd analysis and emphasizes preservation of capital and the power of dividend return compounded.

The asset mix Jan. 1 was 78% stocks, 11.5% bonds and 10.5% cash.

The firm follows 100 stocks closely and 250, generally.

Clients include Rockwell, PacTel, GTE, Oregon and American Airlines.

George J. Rebhan, director of marketing, is the client contact.

## HT Investors Inc.

321 S. Main St., Providence, R.I. 02903; (401) 276-6100

| | |
|---|---|
| Total assets managed | $911,000,000 |
| Tax-exempt assets managed | $911,000,000 |
| 401(k)/457 assets managed | $17,000,000 |
| 401(k)/457 clients | 8 |
| Real estate assets managed | $10,000,000 |
| International assets managed | $2,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 124 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 5 |

HT Investors Inc. is an equity, fixed-income, balanced, real estate, international and GIC manager.

Its equity approach seeks relative value among stocks showing high profitability, positive internal cash flow, strong technical characteristics, low price-to-book ratios and high return on equity. Sector rotation is based on a top-down, macroeconomic outlook. Its fixed-income approach uses interest rate anticipation, and attempts to add value through swaps and purchases of significantly undervalued issues.

The asset mix Jan. 1 was 45% stocks, 29% bonds, 25% cash and 1% equity real estate; $2 million was in foreign stocks.

The parent is RIHT Financial Corp., a Bank of Boston subsidiary.

H.M. Greenleaf Jr., president, is chief investment officer; J. Richard Schroder, marketing director, is client contact.

## Hudson Investment Management Co.

11 Bailey Ave. Suite 1, Ridgefield, Conn. 06877; (203) 438-8332

| | |
|---|---|
| Total assets managed | $0 |
| Minimum separate account | $1,000,00 |
| No. of portfolio managers | 1 |

Hudson Investment Management Co., a fixed-income manager, structures portfolios to be specifically different from, and less volatile than, the market. Incremental returns are sought from selecting misunderstood securities and overweighting out-of-favor sectors. Duration is below market.

Howard G. Hudson is chief investment officer and client contact.

## Huntington Asset Management Co.

41 S. High St., Columbus, Ohio 43215; (614) 463-3797

| | |
|---|---|
| Total assets managed | $1,500,000,000 |
| Tax-exempt assets managed: | |
| Total | $500,000,000 |
| Commingled | $350,000,000 |
| Separate | $150,000,000 |
| Real estate assets managed | $27,000,000 |
| International assets managed | $6,000,000 |
| Indexed assets managed | $2,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 400 |
| Separate | 200 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 6 |

Huntington Asset Management Co. is an equity, fixed-income and balanced manager.

Its equity approach is quantitative, with a computer screen that uses a dividend discount model.

Its fixed-income approach is based on interest rate anticipation and sector analysis. Probability analysis and historic yield spread relationships are used; capital preservation is a priority.

The asset mix Jan. 1 was 40% stocks, 50% bonds, 9.5% cash and 0.5% equity real estate; $25 million was in mortgage-backed securities, $6 million in foreign stocks and $2 million in equity index funds.

The parent company is Huntington Bancshares Inc.

Douglas V. Epp is chief investment officer; William Spetrino, vice president, is client contact.

## Hutchinson National Bank and Trust Co.

P.O. Box 1488, Hutchinson, Kan. 67504-1488; (316) 662-0561

| | |
|---|---|
| Total assets managed | $296,000,000 |
| Tax-exempt assets managed: | |
| Total | $74,000,000 |
| Commingled | $18,000,000 |
| Separate | $56,000,000 |
| Real estate assets managed | $5,000,000 |
| International assets managed | $1,000,000 |
| Dedicated assets managed | $10,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients: | |
| Commingled | 187 |
| Separate | 93 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 5 |
| Size of research staff | 3 |

Hutchinson National Bank and Trust Co. is an equity, fixed-income, balanced and options manager.

Its equity approach combines market and business cycle timing in a top-down approach used with industry segment rotation.

Its fixed-income approach emphasizes marketability; interest rate anticipation is the catalyst to buys and sells.

Options, stock index futures and fixed-income futures are used.

It provides portfolio insurance to two clients covering $2 million in assets.

Dale E. Page, vice president, is the chief investment officer and client contact.

## Hutton Asset Management

71 Broadway 10th Floor, New York, N.Y. 10004; (212) 742-7763

| | |
|---|---|
| Total assets managed | $22,243,000,000 |
| Tax-exempt assets managed | $1,536,000,000 |
| Types of clients | CEFJG |

Hutton Asset Management offers equity, fixed-income and balanced management through its two subsidiaries, profiled below. The parent company is Shearson Lehman Hutton Inc., a unit of American Express Co.

• HUTTON CAPITAL MANAGEMENT, with $1.436 billion in tax-exempt assets, is an equity and balanced manager. It has 349 U.S. tax-exempt institutional clients, nine portfolio managers and a nine-member research staff.

Its value-oriented equity style seeks to identify companies characterized by an attractive combination of profitability, growth and financial strength, priced at below market p/e ratios.

Its fixed-income approach focuses on yield curve inflection and relative attractiveness of government vs. corporate issues. Maturities are kept below 10 years.

The asset mix Jan. 1 was 49% stocks, 29% bonds, 22% cash.

Peter N. Smith, director, is chief investment officer and client contact.

• HUTTON GOVERNMENT SECURITIES MANAGEMENT, with $100 million in tax-exempt assets, is a fixed-income manager that uses U.S. government and selected agency issues.

The asset mix Jan. 1 was 50% Treasury bills and 50% Treasury notes.

There are three portfolio managers and a three-member research staff.

Tom Styles, chief executive officer of Hutton Asset Management, is chief investment officer; Rob Olcott, national product manager, is client contact.

## Hutton Capital Management

17 Battery Place Suite 314, New York, N.Y. 10004; (212) 742-6557

See entry for HUTTON ASSET MANAGEMENT.

## Hutton Government Securities Management

71 Broadway 10th Floor, New York, N.Y. 10004; (202) 861-5059

See entry for HUTTON ASSET MANAGEMENT.

## Idaho First National Bank

P.O. Box 7928, Boise, Idaho 83707; (208) 383-7200

| | |
|---|---|
| Total assets managed | $600,000,000 |
| Tax-exempt assets managed: | |
| Total | $310,000,000 |
| Commingled | $21,000,000 |
| Separate | $289,000,000 |
| Real estate assets managed | $32,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 300 |
| Separate | 25 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 5 |
| Size of research staff | 2 |

Idaho First National Bank is an equity, fixed-income, balanced and real estate manager.

Its equity approach uses a value orientation toward stock selection that originates with a top-down economic overview. It prefers companies with low financial leverage, expanding earnings, below-market p/e and low price/book. Options are used.

Its fixed-income approach uses interest rate trends and forecasts generated from a fundamental view to set portfolio durations. Sector analysis is used to identify vehicles and add incremental returns.

It purchases open-end pooled real estate funds by client specification.

The parent is Moore Financial Group Inc.

Rudy Thomas, vice president and manager-investments, is chief investment officer; John F. Hart, assistant vice president and manager-employee benefit investments, is client contact.

## IDS Equity Advisors/IDS Fixed-Income Advisors

IDS Tower 10, Minneapolis, Minn. 55440; (612) 372-3335

| | |
|---|---|
| Total assets managed | $4,119,000,000 |
| Tax-exempt assets managed | $3,548,000,000 |
| 401(k)/457 assets managed | $175,000,000 |
| Real estate assets managed | $40,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 50 |
| Types of accounts managed | CFJG |
| No. of portfolio managers | 7 |
| Size of research staff | 33 |

IDS Equity Advisors and IDS Fixed-Income Advisors are equity, fixed-income and balanced managers.

The firms use a top-down, sector rotational approach to manage portfolios of large-cap, blue-chip stocks and domestic bonds.

The fixed-income approach uses interest rate anticipation and sector analysis. It is a top-down (economic overview) active approach.

Stock index futures can be used.

The asset mix Jan. 1 was 75% stocks, 17% bonds (including mortgage-backed securities) and 8% cash; $40 million was in mortgage-backed securities.

The parent is IDS Financial Services, a unit of American Express Co.

Clients include Screen Actors Guild - Producers Pension Plan, State of Virginia Supplemental, California Institute of Technology and PacTel.

The chief investment officer is Peter J. Anderson, president-IDS Advisory Group Inc. Client contacts are: Robert W. Edgar Jr., vice president, (Midwest); Diane K. Vener, vice president, (Western Region); and Gabrielle F. Shear, vice president, (Eastern Region).

## IDS Financial Services (Equity Management Service)

IDS Tower 10, Minneapolis, Minn. 55474; (612) 372-3131

| | |
|---|---|
| Total assets managed | $51,000,000 |
| Tax-exempt assets managed | $3,000,000 |
| Minimum separate account | $75,000 |
| Tax-exempt clients | 26 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 1 |
| Size of research staff | 30 |

IDS Financial Services (Equity Management Service), an equity and balanced manager, emphasizes stock selection.

The firm follows 800 stocks closely.

The parent company is IDS Financial Services, a unit of American Express Co.

Clients include Floyd Valley, Wesley Foundation and Databridge.

William Dudley, senior vice president-investment operations, is chief investment officer.

## IDS Growth Spectrum Advisors

IDS Tower 10, Minneapolis, Minn. 55440; (612) 372-3335

| | |
|---|---|
| Total assets managed | $86,000,000 |
| Tax-exempt assets managed | $86,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 12 |
| Types of accounts managed | CJG |
| No. of portfolio managers | 2 |
| Size of research staff | 33 |

IDS Growth Spectrum Advisors is an equity manager emphasizing core growth and emerging growth stocks, and using a top-down and bottom-up approach.

The parent company is IDS Financial Services, a unit of American Express Co.

Clients include Federal Express, Houston Police and Florida State.

Chief investment officer is Edward G. Hartmann, president. Client contacts are: Robert W. Edgar Jr., vice president (Midwest); Gabrielle F. Shear, vice president (Eastern Region); and Diane K. Vener, vice president (Western Region).


What do you call a master trustee that has 4 of the 10 largest corporate pension funds as customers?

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*Tony Terracciano*
*President and Chief Operating Officer*

Mellon Bank

PROFILES

## IDS International Inc.

IDS Tower 10, Minneapolis, Minn. 55440; (612) 372-3335

| | |
|---|---|
| Total assets managed | $953,000,000 |
| Tax-exempt assets managed | $437,000,000 |
| International assets managed | $437,000,000 |
| Minimum separate account | $15,000,000 |
| Tax-exempt clients | 16 |
| Types of accounts managed | CG |
| No. of portfolio managers | 4 |

IDS International Inc. takes a top-down, bottom-up approach to international investing. Based upon a macroeconomic, geopolitical overview, assets are allocated among stocks, bonds and cash; currency views are taken; and countries are distributed into economic categories and weighted.

The firm follows 100 stocks closely and 400, generally; 30% of the research is generated internally.

The parent is IDS Financial Services, a unit of American Express Co.

Clients include Honeywell, Ameritech, Arthur Anderson and Houston Municipal Employees.

Chief investment officer is Peter Lamaison, president. Client contacts are: Robert W. Edgar Jr., vice president (Midwest); Gabrielle F. Shear, vice president (Eastern Region); and Diane K. Vener, vice president (Western Region).

## IDS Trust

2800 Multifoods Tower, Minneapolis, Minn. 55402; (612) 372-2992

| | |
|---|---|
| Total assets managed | $793,000,000 |
| Tax-exempt assets managed: | |
| Total | $793,000,000 |
| Commingled | $713,000,000 |
| Separate | $80,000,000 |
| 401(k) assets managed | $432,000,000 |
| 401(k) clients | 111 |
| International assets managed | $60,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients: | |
| Commingled | 179 |
| Separate | 10 |
| Types of accounts managed | C |
| No. of portfolio managers | 10 |
| Size of research staff | 8 |

IDS Trust, a division of IDS Bank & Trust, is an equity, fixed-income, balanced, global/international and GIC manager.

Its equity approach is active, top-down and sector rotational. It strives to identify sectors of the market that will benefit most from the forecast economic and political environments.

Its fixed-income approach is top-down and sector rotational.

The asset mix Jan. 1 was 14% stocks, 0.5% bonds, 4.5% cash, 61% GICs, 8% international and 12% other.

The parent is IDS Financial Services, a unit of American Express Co.

Peter Anderson, president-IDS Advisory Group, is chief investment officer; Lisa M. Hoene, new client acquisition manager, is the client contact.


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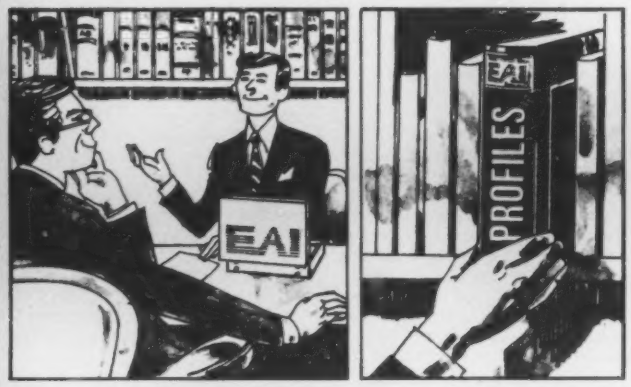


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## IFP Inc.

2001 Bryan Tower Suite 1540, Dallas, Texas 75201; (214) 754-0333

| | |
|---|---|
| Total assets managed | $20,000,000 |
| Tax-exempt assets managed | $20,000,000 |
| Real estate assets managed | $2,000,000 |
| International assets managed | $4,000,000 |
| Tax-exempt clients | 30 |
| Types of accounts managed | C |
| No. of portfolio managers | 3 |
| Size of research staff | 1 |

IFP Inc. is an equity, fixed-income and balanced manager.

Its equity approach focuses on quantitative values coupled with an appraisal of the company's senior management abilities. Its fixed-income approach is passive, focusing on quality issues and laddering maturities.

Options are used.

The firm follows 50 stocks closely and 300, generally; 25% of the research is generated internally.

T. Tim Cullum and Richard L. Sandow are chief investment officers; Steven L. Burks is client contact.

## The Illinois Co. Inc.

30 N. LaSalle St., Chicago, Ill. 60606; (312) 444-2100

| | |
|---|---|
| Total assets managed | $125,000,000 |
| Tax-exempt assets managed | $100,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | CFJ |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

The Illinois Co. Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses Graham & Dodd analysis and asset allocation. Options are used. Its fixed-income approach uses interest rate anticipation and passive structuring.

The firm follows 50 stocks closely; 25% of research is generated internally.

The parent company is Land of Lincoln Savings & Loan.

Paul H. Fricke, senior vice president, is chief investment officer and client contact.

## IMPCO Investment Management Ltd.

330 Bay St. Suite 211, Toronto, Ontario M5H 2S8; (416) 869-1948

| | |
|---|---|
| Total assets managed | $640,000,000 |
| Tax-exempt assets managed: | |
| Total | $640,000,000 |
| For subsidiaries of U.S. firms | $59,000,000 |
| Real estate assets managed | $20,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 25 |
| U.S. subsidiaries | 5 |
| Types of accounts managed | CU |
| No. of portfolio managers | 4 |

IMPCO Investment Management Ltd., a Canadian firm, is an equity, fixed-income, balanced and money market (short-term) manager.

The equity approach emphasizes a top-down/fundamentalist style, seeking value and using sector rotation.

Its fixed-income approach is top-down, based on fundamental analysis leading to an interest rate forecast. Managers use sector spread trades and trade against yield curve anomalies.

The asset mix Jan. 1 was 30% Canadian equities, 38.5% bonds, 19.8% cash, 2.4% mortgages and 9.3% U.S. equities.

The parent company is Imperial Life Assurance Co. of Canada.

Peter M. Walter, president, is chief investment officer; Ian W. Sinclair, vice president, is client contact.

## Independence Investment Associates Inc.

1 Liberty Square, Boston, Mass. 02109; (617) 292-8700

| | |
|---|---|
| Total assets managed | $3,187,000,000 |
| Tax-exempt assets managed | $2,537,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 42 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 7 |
| Size of research staff | 11 |

Independence Investment Associates Inc. is an equity, fixed-income, balanced and amplified alpha manager.

Its equity approach identifies and exploits mispricing opportunities through a disciplined integration of strong, focused fundamental research, quantitative valuation analysis and systematic portfolio implementation.

Fixed-income investments follow an active duration management strategy, based upon yield curve and interest rate analysis.

The asset mix Jan. 1 was 72% stocks, 22% bonds and 6% cash.

The firm follows 400 stocks closely and 3,000 generally; 80% of research is generated internally.

The parent is John Hancock Financial Services.

Clients include American Airlines, Colgate-Palmolive, IBM and Kansas City Public Schools.

William E. Fletcher, executive vice president, is chief investment officer; Vincent B. Burns, senior vice president, is client contact.

## Independence One Investment Services

30665 Northwestern Highway, Farmington Hills, Mich. 48333; (313) 737-3456

| | |
|---|---|
| Total assets managed | $1,394,000,000 |
| Tax-exempt assets managed | $642,000,000 |
| 401(k)/457 assets managed | $2,000,000 |
| 401(k)/457 clients | 2 |
| Real estate assets managed | $60,000,000 |
| International assets managed | $40,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 288 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 14 |

Independence One Investment Services is composed of three subsidiaries: Michigan National Corp.; PRIMA; and Morison Asset Management.

• Michigan National Corp. is an equity, fixed-income, balanced, international and GIC manager.

In equities, it invests in the highest quality companies at points where the market has significantly undervalued the long-run prospects. Its fixed-income approach is technical/fundamental, focusing on a longer-range outlook, as well as relative risk/potential over shorter time horizons.

As of Jan. 1, Michigan National had $990 million in assets, of which $400 million was tax exempt. Its asset mix was 35% stocks, 50% bonds and 15% cash.

Charles Coristine is the chief investment officer and client contact.

• PRIMA is a fixed-income manager.

Its fixed-income approach uses sector analysis and active trend following. It analyzes price movements of Treasuries over historical time periods. It identifies patterns that systematically repeat and correlate with periods of strong performance.

At Jan. 1, PRIMA had $34 million under management, of which $25 million were tax exempt; all was in bonds.

Josef Blass, executive vice president, is chief investment officer; Barbara K. Baker, vice president, is client contact.

• Morison Asset Management, in Minneapolis, is an equity, fixed-income, balanced and international manager.

Its equity approach puts primary emphasis on asset allocation over business and interest rate cycles based on absolute potential/risk analysis. Asset allocation is driven by availability of quality issues using a core stock list of fast growth companies.

Its fixed-income approach takes advantage of yield curve analysis to increase yield and to control maturity and duration of the portfolio.

As of Jan. 1, it managed $370 million, of which $217 million was tax exempt. Its asset mix was 30% stocks, 30% bonds and 40% cash.

Thomas J. Morison is the chief investment officer; Ron Halverson, senior vice president, is client contact.

## India Wharf Associates Inc.

7 Liberty Square, Boston, Mass. 02109; (617) 720-4220

| | |
|---|---|
| Total assets managed | $43,000,000 |
| Tax-exempt assets managed | $4,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 7 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

India Wharf Associates Inc., an equity manager, uses Graham & Dodd analysis with growth, emerging growth and low p/e stocks and market timing. It is fully invested if strategic and tactical conditions are positive.

The firm follows 130 stocks closely and 1,700, generally.

J. Stewart Harvey Jr. is the chief investment officer; William Stout is the client contact.

## Indiana Investment Advisors

1 Indiana Square, Suite 101, Indianapolis, Ind. 46266; (317) 266-6270

| | |
|---|---|
| Total assets managed | $4,718,000,000 |
| Tax-exempt assets managed: | |
| Total | $2,950,000,000 |
| Commingled | $58,000,000 |
| Separate | $2,892,000,000 |
| 401(k)/457 assets managed | $35,000,000 |
| 401(k)/457 clients | 37 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 196 |
| Separate | 221 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 8 |
| Size of research staff | 2 |

Indiana Investment Advisors is an equity, fixed-income, balanced, international and GIC manager.

Its equity approach emphasizes earnings growth and consistency in growth. Additional screening factors include valuation, financial strength and market capitalization.

Its fixed-income approach concentrates on risk-reward, maturity and sector judgments.

The asset mix Jan. 1 was 9% stocks, 83% bonds, 6% cash and 2% other.

The bank follows 30 stocks closely and 300, generally; all research is generated internally.

Clients include Indiana Public Employees, Indiana State Teachers, United Brotherhood of Carpenters and Indianapolis Power & Light.

The parent company is The Indiana National Bank.

P. Roger Kumler is chief investment officer; Charles E. Pike, vice president and trust officer, is client contact.

## Wm. A. Inskeep & Co.

12697 New Brittany Blvd., Fort Myers, Fla. 33907; (813) 939-5161

| | |
|---|---|
| Total assets managed | $15,000,000 |
| Tax-exempt assets managed | $8,000,000 |
| Minimum separate account | $300,000 |
| Tax-exempt clients | 12 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |

Wm. A. Inskeep & Co. is an equity, fixed-income and balanced manager.

Its equity approach includes growth stock and Graham & Dodd principles. Its fundamental approach seeks issues with strong long-term potential. Market timing is used.

Its fixed-income strategy is risk-averse, using only high-quality, short- to intermediate-term issues (one to eight years).

The firm follows 80 stocks closely and 250, generally; 25% of the research is generated internally.

William A. Inskeep, president, is chief investment officer and client contact.

## Institutional Capital Corp.

230 W. Monroe St. Suite 2930, Chicago, Ill. 60606; (312) 641-7200

| | |
|---|---|
| Total assets managed | $903,000,000 |
| Tax-exempt assets managed | $903,000,000 |

401(k)/457 assets managed ..... $27,000,000
401(k)/457 clients ..... 1
Minimum separate account ..... $25,000,000
Tax-exempt clients ..... 13
Types of accounts managed ..... CEF
No. of portfolio managers ..... 5
Size of research staff ..... 6

Institutional Capital Corp., an equity and balanced manager, emphasizes sector rotation and market timing in its equity investments. Interest rate anticipation is used for fixed income. Options are used.

The asset mix Jan. 1 was 71% stocks, 10% bonds and 19% cash.

The firm follows 150 stocks closely and 500, generally; 75% of the research is generated internally. Clients include Jewel, Quaker Oats, Litton Industries and S.C. Johnson & Son.

William A. Maloney, president, is chief investment officer; Russell C. Walter, executive vice president, is client contact.

## Institutional Portfolio Services Ltd.

1 First National Plaza Suite 2594, Chicago, Ill. 60603; (312) 236-5388

Total assets managed ..... $85,000,000
Tax-exempt assets managed .... $70,000,000
Minimum separate account ..... $250,000
Tax-exempt clients ..... 40
Types of accounts managed ..... CEF
No. of portfolio managers ..... 2

Institutional Portfolio Services Ltd. is an equity, fixed-income and balanced manager.

Its equity approach is eclectic, keeping in mind the three- to four-year economic and political cycle, and emphasizing industry concentration. Among the approaches used are Graham & Dodd analysis, low p/e stocks and sector rotation. For market timing, covered options are sold. Stock index futures also are used.

Its fixed-income approach is based on interest rate anticipation.

B.P. Pai, president, is chief investment officer; Denise M. Iwaniec, executive assistant, is client contact.

## Integrated Resources Asset Management Corp.

666 Third Ave. Fifth Floor, New York, N.Y. 10017; (800) 232-1230 or (212) 551-6700

Total assets managed ..... $4,000,000,000
Tax-exempt assets managed ... $120,000,000
Minimum separate account ..... $100,000
Tax-exempt clients ..... 40
Types of accounts managed ..... CEFJG
No. of portfolio managers ..... 6
Size of research staff ..... 1

Integrated Resources Asset Management Corp., an equity and balanced manager, takes an approach that superimposes timely investment themes on the securities of well-researched companies of extraordinary value.

The firm follows 200 stocks closely.

The parent company is Integrated Resources Inc.

Harvey P. Eisen is chief investment officer; Maureen R. Ford, first vice president/national marketing manager, is client contact.

## Interinvest Corp.

84 State St. Sixth Floor, Boston, Mass. 02109; (617) 723-7870

Total assets managed ..... $75,000,000
Tax-exempt assets managed .... $45,000,000
International assets managed ... $22,000,000
Minimum separate account ..... $500,000
Tax-exempt clients ..... 30
Types of accounts managed ..... CEFJ
No. of portfolio managers ..... 5
Size of research staff ..... 6

Interinvest Corp. is an equity, fixed-income, balanced and international manager.

Managers determine market timing, country allocation and sector allocation for equities using a global top-down geopolitical, geoeconomic approach. Individual selections are made using Graham & Dodd analysis. Options and stock index futures are used.

Its fixed-income approach is based on global interest rate assessments.

It is affiliated with HB Investment & Finanz AG, Zurich, Switzerland.

Hans Black is chief investment officer; Stanley T. Schmidt is client contact.

## The International Trust Co.

Box 75, Royal Bank Plaza North Tower, 14th Floor, Toronto, Ontario M5J 2J2; (416) 865-0515

Total assets managed ..... $127,000,000
Tax-exempt assets managed:
Total ..... $127,000,000
For subsidiaries of U.S. firms . $25,000,000
Tax-exempt clients ..... 30
U.S. subsidiaries ..... 8
Types of accounts managed ..... CGU
No. of portfolio managers ..... 1

The International Trust Co., a Canadian firm, is an equity, fixed-income, balanced and short-term manager.

Its equity approach is value-oriented, using low p/e, sector rotation and market timing. Its fixed-income approach is based on interest rate anticipation, sector analysis and duration management.

The parent company is Starlaw Holdings.

Toronto Investment Management runs $70 million on behalf of International Trust.

Mohammed Mahmoodallah, vice president, is chief investment officer; Brian Cope, vice president, is client contact.

## Interstate Asset Management Inc.

2600 NCNB Plaza, Charlotte, N.C. 28280; (704) 379-9097

Total assets managed ..... $73,000,000
Tax-exempt assets managed .... $32,000,000
Minimum separate account ..... $500,000
Tax-exempt clients ..... 46
Types of accounts managed ..... CEF
No. of portfolio managers ..... 3
Size of research staff ..... 1

Interstate Asset Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach emphasizes high-quality, fundamentally strong companies using Graham & Dodd analysis. It focuses on growth stock, sector rotation and market timing.

The fixed-income approach uses interest rate anticipation, sector analysis and duration-based risk management.

The parent company is Interstate Securities Inc.

Donn J. Toney, managing director, is chief investment officer; James T. Moorhead, president, is client contact.

## Inverness Counsel Inc.

545 Madison Ave. Ninth Floor, New York, N.Y. 10022; (212) 980-5230

Total assets managed ..... $792,000,000
Tax-exempt assets managed ... $268,000,000
Minimum separate account ..... $1,000,000
Tax-exempt clients ..... 29
Types of accounts managed ..... CFG
No. of portfolio managers ..... 12
Size of research staff ..... 1

Inverness Counsel Inc. is an equity, fixed-income and balanced manager.

The equity approach uses a qualitative, top-down economic analysis modified by quantitative price momentum; fundamental cross-plotted computer screens develop the firm's stock universe and industry weighings.

Its fixed-income approach is passive. Maturities are spaced with selection focusing on the yield curve inflection point.

The firm follows 100 stocks closely and 300, generally; 75% of the research is generated internally.

Clients include Hollywood (Fla.) Police, Edward John Noble Foundation, Miami Beach Police/Fire and the Pembroke Pines (Fla.) Police/Fire.

George H. Garfield is chief investment officer and client contact.

## INVESCO Capital Management

1315 Peachtree St. Suite 300, Atlanta, Ga. 30309; (404) 892-0875

Total assets managed ..... $10,702,000,000
Tax-exempt assets managed . $10,602,000,000
401(k)/457 assets managed ..... $38,000,000
401(k)/457 clients ..... 1
Real estate assets managed ..... $10,000,000
Dedicated funds managed ..... $70,000,000
Minimum separate account ..... $10,000,000
Tax-exempt clients ..... 114
Types of accounts managed ..... CEFJG
No. of portfolio managers ..... 16

INVESCO Capital Management is an equity, fixed-income, balanced and global/international manager.

Its equity approach combines sector rotation and Graham & Dodd analysis. The primary emphasis is on issue selection.

Its fixed-income approach is active, based on credit and sector analysis strategies and research. Stock index futures are used.

The asset mix Jan. 1 was 68% stocks, 23% bonds and 9% cash; $10 million was in mortgage-backed securities.

The firm follows 100 stocks closely and 800, generally; 70% of the research is generated internally.

Clients include GM, Boeing, NCR and Texaco.

Wendell M. Starke, president, is chief investment officer; Willis M. Everett III is client contact.

## INVESCO MIM International

101 E. 52nd St. Manhattan Tower, New York, N.Y. 10022; (212) 888-5820

Total assets managed ..... $180,000,000
Tax-exempt assets managed ... $180,000,000
Minimum separate account ..... $10,000,000
Tax-exempt clients ..... 5
Types of accounts managed ..... CEG
No. of portfolio managers ..... 73

INVESCO MIM International Ltd. is a global equity, fixed-income and balanced manager.

Its equity approach emphasizes sector rotation and low p/e stocks. For fixed-income investments it uses a high-quality duration approach.

The parent company is INVESCO L.P., of which INVESCO Capital Management, Atlanta, is the general partner with 55% and Britannia Arrow Holdings, London, the limited partner with 45%.

Nicholas A.D. Johnson is vice chairman and chief investment officer; Frank J. Keeler, president, is client contact.

## Investment Advisers Inc.

1100 Dain Tower P.O. Box 357, Minneapolis, Minn. 55440; (612) 371-7780

Total assets managed ..... $5,800,000,000
Tax-exempt assets managed .. $5,200,000,000
International assets managed .... $12,000,000
Minimum separate account ..... $10,000,000
Tax-exempt clients ..... 151
Types of accounts managed ..... CEFJG
No. of portfolio managers ..... 10
Size of research staff ..... 2

Investment Advisers Inc. is an equity, fixed-income, balanced and venture capital manager. International management is offered through Hill Samuel/Investment Advisers Ltd.

Its equity approach is based on sector rotation, moving into investment themes secular or cyclical in nature.

Its fixed-income approach emphasizes active duration management, using a cyclical approach. Credit cycle analysis drives maturity and duration. Another approach emphasizes duration matching to either a predetermined index or the duration of the liabilities.

The asset mix Jan. 1 was 40% stocks and 60% bonds; $12 million was in foreign stocks.

The firm follows 150 stocks closely and 1,500, generally; 35% of the research is generated internally.

The parent company is Hill Samuel Group PLC.

Clients include 3M, Newmont Mining, New Hampshire Retirement System and New York City District Council of Carpenters.

Noel P. Rahn, chief executive officer, is the chief investment officer; I.P. "Kip" Knelman, executive vice president and director, is the client contact.

## Investment Advisors Inc.

1100 Louisiana Suite 2600, Houston, Texas 77002; (713) 659-2611

Total assets managed ..... $673,000,000
Tax-exempt assets managed ... $556,000,000
401(k)/457 assets managed ..... $20,000,000
401(k)/457 clients ..... 4
Minimum separate account ..... $1,000,000
Tax-exempt clients ..... 56
Types of accounts managed ..... CEFJG
No. of portfolio managers ..... 6
Size of research staff ..... 1

Investment Advisors, Inc. is an equity, fixed-income and balanced manager.

Its top-down equity approach combines sector rotation with an emphasis on growth stocks.

Its fixed-income approach uses interest rate anticipation, sector analysis and duration management based upon yield curve and macroeconomic analysis. Portfolios are restricted to investment-grade securities.

The asset mix Jan. 1 was 55% stocks, 42% bonds and 3% cash.

The firm follows 75 stocks closely and 1,000, generally; 50% of the research is generated internally.

Clients include Federal Express, FNMA, Shreveport, La., and San Jose, Calif.

**What do you call a master trustee whose total assets have grown nearly 700% since 1982?**

*"Dedicated to performance. Let's face it, we wouldn't have the business if we weren't."*

*Tony Terracciano*
*President and Chief Operating Officer*

**Mellon Bank**

Marvin H. McMurrey, president, is chief investment officer; William L. Price, vice president, is client contact.

## Investment Advisory Services Inc.

175 W. Jackson Blvd. Suite A1507, Chicago, Ill. 60604; (312) 939-6110

| | |
|---|---|
| Total assets managed | $300,000,000 |
| Tax-exempt assets managed | $20,000,000 |
| Real estate assets managed | $2,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 6 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 1 |

Investment Advisory Services Inc. is an equity, fixed-income and balanced manager.

Its equity approach is top-down and rotational, emphasizing medium- and large-cap stocks with predictable earnings growth and average market valuations.

Its fixed-income approach strategy is passive and uses sector analysis. Emphasis is on above-investment-grade securities of seven to 12 years. It specializes in mortgage-backed and high-coupon issues.

Clients include Chicago Firemen.

John A. McPike is chief investment officer and client contact.

## Investment and Capital Management Corp.

2 Continental Towers, 1701 Golf Road, Suite 504, Rolling Meadows, Ill. 60008; (312) 439-8500

| | |
|---|---|
| Total assets managed | $1,248,000,000 |
| Tax-exempt assets managed | $1,156,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 90 |
| Types of accounts managed | CFJG |
| No. of portfolio managers | 12 |

Investment and Capital Management Corp. is an equity, fixed-income and balanced manager.

Its equity approach combines asset allocation and sector rotation. Individual issues are selected using a value-oriented, multivariable approach. Its fixed-income approach uses interest rate anticipation and sector analysis. Maturity and sector emphasis is actively adjusted. Options, stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 65% stocks, 30% bonds and 5% cash.

The firm follows 120 stocks closely and 300, generally; 33% of the research is generated internally.

The parent company is Chemical New York Corp.

Clients include Kansas Public Employees', Orange County Employees', National Can and the International Union of Operating Engineers.

Franklin E. Ayres, senior vice president, is chief investment officer; Marisa C. Newman, assistant vice president, is client contact.

## The Investment Counsel Co.

56 E. Pine St. Suite 200, Orlando, Fla. 32801; (305) 841-6241

| | |
|---|---|
| Total assets managed | $393,000,000 |
| Tax-exempt assets managed | $376,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 102 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 3 |
| Size of research staff | 3 |

The Investment Counsel Co. is an equity, fixed-income and balanced manager.

Its equity approach is bottom-up and value-oriented. The firm holds only companies it knows well and buys only at the price it wants.

The fixed-income approach is based on interest rate anticipation, managing bond portfolios to provide stability through moderate maturity shifts and the use of high-quality issues.

The firm follows 100 stocks closely and 300, generally; 50% of the research is generated internally.

Clients include Florida Patient's Compensation Fund, Miami Beach Retirement System, United Dairy Industry Association and Orlando Police & Firefighters.

Fred J. Shockley, senior vice president, is chief investment officer; Grant McMurry, vice president, is client contact.

## Investment Counselors of Maryland

803 Cathedral St., Baltimore, Md. 21201; (301) 539-3838

| | |
|---|---|
| Total assets managed | $2,299,000,000 |
| Tax-exempt assets managed | $2,141,000,000 |
| Real estate assets managed | $372,000,000 |
| International assets managed | $19,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 110 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 8 |

Investment Counselors of Maryland is an equity, fixed-income and balanced manager.

Its equity approach emphasizes low p/e stocks and Graham & Dodd analysis. Its fixed-income approach uses interest rate anticipation and sector analysis.

The asset mix Jan. 1 was 37% stocks, 24% bonds, 15% cash, 17% mortgage-backed securities and 7% floating-rate notes; $19 million was in foreign stocks.

The firm follows 50 stocks closely and 3,000, generally; 65% of the research is generated internally.

The parent company is United Asset Management.

Clients include AT&T, Maryland State, Johns Hopkins Hospital and Cincinnati.

Craig Lewis, president, is chief investment officer; Robert B. Russell II is client contact.

## Investment Management Inc.

2700 E. 51st St. Suite 340, Tulsa, Okla. 74105; (918) 742-3031

| | |
|---|---|
| Total assets managed | $21,000,000 |
| Tax-exempt assets managed | $5,000,000 |
| Minimum separate account | $200,000 |
| Tax-exempt clients | 18 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

Investment Management Inc. is an equity, fixed-income, balanced and mutual funds manager.

Its equity approach is based on sector rotation and market timing; its fixed-income approach, on interest rate anticipation.

The firm follows 200 stocks generally.

The parent company is Rubottom, Dudash & Associates Inc.

Donald J. Rubottom is chief investment officer and client contact.

## Investment Management Services

777 E. Wisconsin Ave. Suite 3400, Milwaukee, Wis. 53211; (414) 765-3562

| | |
|---|---|
| Total assets managed | $320,000,000 |
| Tax-exempt assets managed | $165,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 28 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 6 |
| Size of research staff | 2 |

Investment Management Services is an equity, fixed-income and balanced manager.

Its fundamental equity approach focuses on quality growth stock issues.

Its fixed-income approach is dependent on sector analysis for investment selection. Interest rate anticipation is used to forecast major market swings.

The parent company is Robert W. Baird & Co. Inc.

Robinson Bosworth III, senior vice president, is the chief investment officer and the client contact.

## Investment Research Co.

111 W. Jackson Blvd. Suite 1700, Chicago, Ill. 60604; (312) 930-3944

| | |
|---|---|
| Total assets managed | $40,000,000 |
| Tax-exempt assets managed | $20,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 1 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Investment Research Co., an equity manager, uses a long-term passive investing and indexing framework. Non-linear optimization techniques are used to select a diversified portfolio using growth and group behavior among other factors.

The firm follows the S&P 500 stocks.

Clients include General Electric.

F.J. Gould, president, is chief investment officer and client contact.

## Investors Asset Management Inc.

2309-A Colt Road, Plano, Texas 75075; (214) 985-7162

| | |
|---|---|
| Total assets managed | $8,000,000 |
| Tax-exempt assets managed | $1,000,000 |
| Minimum separate account | $50,000 |
| Tax-exempt clients | 23 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |

Investors Asset Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach is based on growth and low p/e stocks and sector rotation; its fixed-income approach, on interest rate anticipation and sector analysis.

The firm follows 39 stocks closely and 66, generally; 40% of the research is generated internally.

Clients include Amar Medical and First United Methodist Church of Berwyn, Ill.

Richard C. Erwin, president, is chief investment officer and client contact.

## Investors Group Trust Co.

447 Portage Ave., Winnipeg, Manitoba R3C 3B6; (204) 943-0361

| | |
|---|---|
| Total assets managed | $251,000,000 |
| Tax-exempt assets managed | $251,000,000 |
| Real estate assets managed | $106,000,000 |
| Minimum separate account | $19,200,000 |
| Tax-exempt clients | 1,465 |
| Types of accounts managed | CEFGU |
| No. of portfolio managers | 11 |
| Size of research staff | 4 |

Investors Group Trust Co. Ltd., a Canadian firm, is an equity, fixed-income and balanced manager.

Its equity approach uses a conservative stock selection process, emphasizing industry sector rotation and liquidity factors.

Its fixed-income approach blends an actively traded high-quality bond portfolio with mortgages, altering the ratio depending upon interest rate spreads and the economic cycle.

The parent company is Investors Group Inc.

R.E. Archer, executive vice president-investment and trust, is chief investment officer and client contact.

## Investors Management Services Inc.

P.O. Box 3700, Birmingham, Mich. 48012; (313) 642-1020

| | |
|---|---|
| Total assets managed | $200,000,000 |
| Tax-exempt assets managed | $100,000,000 |
| International assets managed | $3,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 80 |
| Types of accounts managed | CF |
| No. of portfolio managers | 2 |

Investors Management Services Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses low p/e stocks, combining sector rotation and market timing to capitalize on inefficiencies in the market.

Its fixed-income approach uses sector analysis, attempting to maximize returns by shortening or lengthening maturities based on interest rate forecasts.

Richard H. Wiggins, president, is chief investment officer; Gerald DeHondt, vice president, is client contact.

## Investors Research Co.

1900 State St. Suite H, Santa Barbara, Calif. 93101; (805) 569-1078

| | |
|---|---|
| Total assets managed | $136,000,000 |
| Tax-exempt assets managed | $108,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 23 |
| Types of accounts managed | CF |
| No. of portfolio managers | 4 |
| Size of research staff | 1 |

Investors Research Co., an equity manager, emphasizes stock price trend analysis, which leads to a concentration in the market's leadership sectors. Its defensive strategy features heavy emphasis on cash equivalents.

The firm follows 850 stocks closely and 2,500, generally; 90% of the research is generated internally.

John R. Noble is chief investment officer; Ted de Jony is client contact.

## Investors Research Corp.

10 Gould Center, Suite 408, Rolling Meadows, Ill. 60008; (312) 640-1511

| | |
|---|---|
| Total assets managed | $5,483,000,000 |
| Tax-exempt assets managed | $924,000,000 |
| 401(k)/457 assets managed | $496,000,000 |
| 401(k)/457 clients | 37 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 41 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 7 |
| Size of research staff | 5 |

Investors Research Corp., an equity manager, emphasizes growth and emerging growth stocks, employing a bottom-up approach that uses a 7,000-issue data base. It follows a rigid sell discipline and remains fully invested.

All assets were in stocks Jan. 1.

The firm follows 400 stocks closely and 7,000, generally; 85% of the research is generated internally.

Clients include Wisconsin Electric, Amax, Ingersoll-Rand and Missouri State Employees'.

James E. Stowers Jr., Dennis von Waaden, Robert Puff Jr. and James E. Stowers III are chief investment officers; Stephen M. Barney and John F. Rogers, vice presidents, are client contacts.

## Invista Capital Management

601 Locust, Suite 1150, Des Moines, Iowa 50309; (515) 247-7424

| | |
|---|---|
| Total assets managed | $2,864,000,000 |
| Tax-exempt assets managed | $2,016,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | CFG |
| No. of portfolio managers | 2 |
| Size of research staff | 6 |

Invista Capital Management Inc., an equity manager, develops investment themes and then selects stocks based on expected long-term cash flows. Sector rotation is used.

The asset mix Jan. 1 was 98.3% stocks and 1.7% cash.

The firm follows 5,000 stocks closely and 3,000 generally; 95% of the research is conducted internally.

The parent is Principal Financial Group.

Clients include U.S. Olympic Foundation, Iowa Public Employees and Martin Marietta.

S. Ralph Kosmicke is chief investment officer; Kenneth Fridrich, vice president, is client contact.

## Irving Trust Co.

One Wall St., New York, N.Y. 10015; (212) 635-8221

| | |
|---|---|
| Total assets managed | $8,534,600,000 |
| Tax-exempt assets managed: | |
| Total | $5,341,000,000 |
| Commingled | $2,464,000,000 |
| Separate | $2,877,000,000 |
| Real estate assets managed | $320,000,000 |
| International assets managed | $6,000,000 |
| Indexed assets managed | $40,000,000 |
| Dedicated assets managed | $367,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients: | |
| Commingled | 250 |
| Separate | 193 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 10 |
| Size of research staff | 11 |

Irving Trust Co. is an equity, fixed-income, balanced, international and passive/structured manager.

Its value-oriented equity approach is bottom-up, seeking stocks that are cheap relative to the company's anticipated profit and dividend growth. Primary emphasis is on companies expected to experience significant acceleration in earnings growth during the next three to five years.

Its active fixed-income approach uses valuation analysis and interest rate forecasting to determine maturity/duration. Maturity averages between three and 15 years. Options and fixed-income futures are used.

The asset mix Jan. 1 was 12% stocks, 77% bonds (including mortgage-backed securities) and 11% cash.

The parent company is Irving Bank Corp.

Gary N. Yalen, executive vice president, is the chief investment officer; John A. Spiezia, vice president, is the client contact.

## Ivory & Sime International

39 Main St., Chatham, N.J. 07928; (201) 635-6700

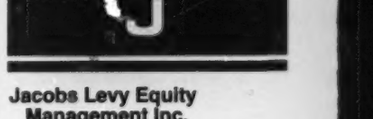
| | |
|---|---|
| Total assets managed | $134,000,000 |
| Tax-exempt assets managed | $116,000,000 |
| International assets managed | $94,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 3 |
| Types of accounts managed | C |
| No. of portfolio managers | 42 |

Ivory & Sime International Inc., an international equity manager, emphasizes growth stock, sector rotation and market timing, using long-term fundamentals in a research-based approach. Emphasis is on stock selection and identifying companies in a global context.

The firm follows 800 stocks closely and 1,000, generally; 50% of the research is generated internally.

The parent companies are Ivory & Sime PLC and Jamison, Eaton & Wood Inc.

Keith H. Wood, president, is chief investment officer and client contact.



## Jacobs Levy Equity Management Inc.

Edgewater Commons Suite 2, 81 Two Bridges Road, Fairfield, N.J. 07006; (201) 882-0066

| | |
|---|---|
| Total assets managed | $0 |
| Minimum separate account | $10,000,000 |
| No. of portfolio managers | 2 |

Jacobs Levy Equity Management Inc., an equity manager, follows a quantitatively driven stock rotation strategy using proprietary anomaly and sector models.

The firm follows 3,000 stocks closely and 3,000, generally; all research is generated internally.

Bruce I. Jacobs and Kenneth N. Levy are the chief investment officers; Mr. Jacobs is the client contact.

## Jacques & Kurdziel Ltd.

405 Park Ave. Suite 600, New York, N.Y. 10022; (212) 758-8778

| | |
|---|---|
| Total assets managed | $240,000,000 |
| Tax-exempt assets managed | $0 |

Jacques & Kurdziel Ltd. is a real estate manager for Dutch institutions. It seeks office buildings and regional malls, on an all-cash basis, with development or redevelopment potential.

W. Murray Jacques and Donald M. Kurdziel are the client contacts.

Consultants: Oct. 17.

PROFILES

### James Investment Research
P.O. Box 8, Alpha, Ohio 45301; (513) 426-7640

| | |
|---|---|
| Total assets managed | $450,000,000 |
| Tax-exempt assets managed | $171,000,000 |
| Minimum separate account | $2,500,000 |
| Tax-exempt clients | 64 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 5 |
| Size of research staff | 8 |

James Investment Research Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses growth and low p/e stocks with sector rotation, market timing and quantitative approaches. It seeks neglected stocks that have excellent fundamentals.

For fixed-income, only high-quality bonds are bought, with maturities based on interest rate forecasts.

The firm follows 160 stocks closely and 4,000, generally; all research is generated internally.

Francis E. James Jr., president and founder, is chief investment officer; Diane M. Rose and Barry R. James are the client contacts.

### James River Capital Management Inc.
909 E. Main St. Suite 321, Richmond, Va. 23219; (804) 782-8725

| | |
|---|---|
| Total assets managed | $150,000,000 |
| Tax-exempt assets managed | $72,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 50 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 4 |

James River Capital Management Inc. is an equity and balanced manager.

Asset allocation and stock selection are driven by systematic analysis of valuation, fundamental and psychological data. Stocks are screened for low p/e, earnings momentum and reported earnings above expectations.

Its fixed-income approach is based on interest rate anticipation. Computer-based models analyze economic and monetary rate of change data.

The parent company is Scott & Stringfellow Financial Inc.

Paul C. Munson is chief investment officer; Charles K. Fox, managing director, is client contact.

### Jamison, Eaton & Wood Inc.
39 Main St., Chatham, N.J. 07928; (201) 635-6700

| | |
|---|---|
| Total assets managed | $5,361,000,000 |
| Tax-exempt assets managed | $5,257,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 33 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 6 |

Jamison, Eaton & Wood Inc. is an equity, fixed-income and balanced manager.

Its equity approach seeks to provide long-term superior returns with limited risk and capital preservation in down markets. Both top-down asset mix decisions (interest rates, profits) and bottom-up stock selection (ROE, margins) are employed. Sector rotation is pursued within these disciplines.

Its fixed-income approach applies risk reduction techniques to both the maturity and quality decisions. The process is based on the integration of top-down policy-making and bottom-up company analysis. Anticipated changes in interest rates and credit rating are taken into account.

The asset mix Jan. 1 was 55% stocks, 23% bonds and 22% cash.

The firm follows 125 stocks closely and 300, generally; 50% of the research is generated internally.

Keith H. Wood, chairman, is chief investment officer and client contact.

### Jarislowsky, Fraser & Co.
65 Queen St. W., Suite 1501, Toronto, Ontario M5H 2M5; (416) 363-7417

| | |
|---|---|
| Total assets managed | $8,100,000,000 |
| Tax-exempt assets managed: | |
| Total | $6,900,000,000 |
| For subsidiaries of U.S. firms | $900,000,000 |
| Minimum separate account | $7,000,000 |
| Tax-exempt clients | 192 |
| U.S. subsidiaries | 27 |
| Types of accounts managed | CEFGU |
| No. of portfolio managers | 10 |

Jarislowsky, Fraser & Co., a Canadian firm, is an equity, fixed-income and balanced manager.

Its equity approach is based on fundamental research using Graham & Dodd analysis. Emphasis is placed on value analysis, financial strength and management competence.

Its fixed-income approach uses interest rate anticipation and sector analysis. It maximizes yield primarily by investing in quality corporate bonds. Three criteria are used — safety of principal, average term and yield optimization.

The asset mix Jan. 1 was 32% Canadian stocks, 48% bonds, 8% cash and 12% U.S. stocks.

It follows 60 stocks closely and 100, generally; all research is generated internally.

Clients include F.W. Woolworth, Weston, Xerox Canada and Abitibi.

Stephen Jarislowsky, president, is chief investment officer; Lorne T. Wickerson is client contact.

### JCB Asset Management
330 Commerce St., Nashville, Tenn. 37201; (615) 748-9422

| | |
|---|---|
| Total assets managed | $130,000,000 |
| Tax-exempt assets managed | $104,000,000 |
| Real estate assets managed | $3,000,000 |
| Minimum separate account | $200,000 |
| Tax-exempt clients | 110 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 4 |
| Size of research staff | 12 |

JCB Asset Management is an equity, fixed-income and balanced manager.

Its equity approach seeks companies with strong earnings, preferably accelerating earnings growth, that are outperforming the market in terms of price movement. Its fixed-income approach is passive, using laddered short- to intermediate-term bonds.

It follows 40 stocks closely and 2,500, generally.

The parent is J.C. Bradford & Co.

Norris Nielsen, president, is chief investment officer; Tom Pollock is client contact.

### Jennison Associates Capital
466 Lexington Ave., New York, N.Y. 10017; (212) 421-1000

| | |
|---|---|
| Total assets managed | $20,439,000,000 |
| Tax-exempt assets managed | $20,424,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 80 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 7 |
| Size of research staff | 6 |

Jennison Associates Capital Corp. is an equity, fixed-income and balanced manager.

In fixed-income, it actively manages long-term, high-quality bonds and handles controlled accounts. It also manages dedicated and quantitatively structured accounts.

The asset mix Jan. 1 was 29.7% stocks, 63.9% bonds (including mortgage-backed securities) and 6.4% cash.

The firm follows 300 stocks closely and 300, generally; between 75% and 95% of research is generated internally.

The parent company is The Prudential Insurance Co. of America.

Spiros Segalas, director and senior vice president, is chief investment officer; John H. Hobbs, president, is client contact.

### Jenswold, King & Associates Inc.
Sage Plaza, 5151 San Felipe Suite 1450, Houston, Texas 77056-3698; (713) 961-0462

| | |
|---|---|
| Total assets managed | $279,000,000 |
| Tax-exempt assets managed | $115,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 59 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 4 |
| Size of research staff | 1 |

Jenswold, King & Associates Inc. is an equity and balanced manager.

Its value-oriented equity approach features asset allocation and an emphasis on preservation of capital. Investments generally have low p/es, high yields or substantial asset values.

Its fixed-income approach regulates maturities based on the slope of the yield curve and the firm's rate expectations. Straight debt issues rated AAA or better plus convertible bonds trading on a debt basis are used.

Roger H. Jenswold is chief investment officer; Roger E. King, president, is the client contact.

Public funds: Nov. 28.

### JMB Institutional Realty
875 N. Michigan Ave. Suite 3960, Chicago, Ill. 60611-1950; (312) 915-1900

| | |
|---|---|
| Total assets managed | $10,900,000,000 |
| Tax-exempt assets managed | $5,800,000,000 |
| Real estate assets managed | $5,800,000,000 |
| Minimum separate account | $100,000,000 |
| Tax-exempt clients | 218 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 8 |
| Size of research staff | 30 |

JMB Institutional Realty Corp., a real estate manager, makes equity investments in diversified portfolios of new and existing larger retail, office, industrial and apartment properties using complementary investment structures to optimize returns and emphasizing intensive property management to add value. All assets were invested in equity real estate Jan. 1.

Clients include General Board of Pensions of the United Methodist Church, Stanford University, Pennsylvania State Employees and Xerox.

Neil G. Bluhm, president of JMB Realty Corp., is chief investment officer; John S. Lillard, president of JMB Institutional Realty Corp., is client contact.

### JMC Capital Management
2 Lakeway Center Suite 1400, 3850 N. Causeway Blvd., Metairie, La. 70002; (504) 833-1111

| | |
|---|---|
| Total assets managed | $170,000,000 |
| Tax-exempt assets managed | $93,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 91 |
| Types of accounts managed | CF |
| No. of portfolio managers | 4 |

JMC Capital Management Inc. is an equity and balanced manager.

Its equity approach uses growth stocks and sector rotation. It is both top-down and bottom-up in approach, generally using 20 to 30 small- and medium-cap stocks. Its fixed-income approach is defensive, focusing on government and government agency issues. The average maturity of portfolios is between one and five years.

Clients include Kentwood Spring Water, Rayne Memorial Legacy Fund, and Long Electric.

Franklin H. Jones Jr., is chief investment officer; Scott M. Harrington, vice president, is client contact.

### Johnson Investment Counsel Inc.
5556 Cheviot Road, Cincinnati, Ohio 45247; (513) 385-4001

| | |
|---|---|
| Total assets managed | $335,000,000 |
| Tax-exempt assets managed | $186,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 96 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 4 |
| Size of research staff | 3 |

Johnson Investment Counsel Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses Graham & Dodd analysis and growth stocks in a top-down approach with sector analysis. For fixed income it uses sector analysis, making selections based on quality, duration and special situations. It emphasizes convertible bonds.

Clients include University of Cincinnati Endowment, Marietta College Endowment and Bethesda Foundation.

Timothy E. Johnson is chief investment officer; Scott F. Muhlhauser is client contact.

### Tom Johnson Investment Management Inc.
1 Leadership Square Suite 1510, 211 N. Robinson, Oklahoma City, Okla. 73102; (405) 236-2111

| | |
|---|---|
| Total assets managed | $765,000,000 |
| Tax-exempt assets managed | $688,000,000 |
| 401(k)/457 assets managed | $16,000,000 |
| 401(k)/457 clients | 9 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 89 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 4 |
| Size of research staff | 3 |

Tom Johnson Investment Management Inc. is an equity, fixed-income and balanced manager.

Its top-down equity approach uses sector rotation. Its fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 40% stocks, 45% bonds and 15% cash.

It follows 50 stocks closely and 2,000, generally; 15% of research is generated internally. Clients include Oklahoma Teachers, Texas Instruments and Southwest Airlines.

Thomas E. Johnson is chief investment officer; Jerry L. Wise is client contact.


**What do you call a master trustee that still has 98% of its original customers?**

*"Service oriented. This is a business where attention to details means everything."*

*Tony Terracciano*
*President and Chief Operating Officer*

Mellon Bank

## Jones Lang Wootton Realty Advisors

101 E. 52nd St., New York, N.Y. 10022; (212) 688-8181

| | |
|---|---|
| Total assets managed | $1,500,000,000 |
| Tax-exempt assets managed | $1,000,000,000 |
| Real estate assets managed | $1,000,000,000 |
| Minimum separate account | $200,000,000 |
| Tax-exempt clients | 6 |
| Types of accounts managed | CG |
| No. of portfolio managers | 4 |
| Size of research staff | 6 |

Jones Lang Wootton Realty Advisors, a real estate manager, takes an opportunistic approach that allows for value creation through aggressive property management, leasing, development management and leveraging techniques.

All tax-exempt assets were in equity real estate Jan. 1.

Clients include PacTel, U S WEST and Illinois Teachers.

John A. Weisz is client contact.

## Jundt/Capen Associates Inc.

1550 Utica Ave. S. Suite 950, Minneapolis, Minn. 55416; (612) 541-0677

| | |
|---|---|
| Total assets managed | $1,367,000,000 |
| Tax-exempt assets managed | $1,367,000,000 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 24 |
| Types of accounts managed | CPJG |
| No. of portfolio managers | 3 |

Jundt/Capen Associates Inc., a growth-stock manager, follows a very disciplined style for its emerging growth and core portfolios.

The asset mix Jan. 1 was 95% stocks and 5% cash.

It follows 100 stocks closely and 250, generally; 35% of research is generated internally.

Clients include Dana, Pacific Gas & Electric, Pacific Telesis and Champion International.

James R. Jundt, chairman, is chief investment officer and client contact.

## Jurika & Voyles Inc.

1999 Harrison Suite 700, Oakland, Calif. 94612-3517; (415) 446-1991

| | |
|---|---|
| Total assets managed | $110,000,000 |
| Tax-exempt assets managed | $60,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 25 |
| Types of accounts managed | CP |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

Jurika & Voyles Inc. is an equity and balanced manager.

The firm's equity approach uses Graham & Dodd analysis and low p/e stocks. It approaches stocks as though it were to buy the whole company at present market value. Managers concentrate on cash flow and will not pay p/e multiples higher than the averages.

Fixed-income investments are made based on a momentum index consisting of eight interest rate indicators. When the index reverses, maturities are lengthened or shortened.

Clients include Robert Mondavi and Central Bank.

William K. Jurika is chief investment officer and client contact.

# K

## Kahn Brothers & Co. Inc.

1 Exchange Plaza, 55 Broadway, New York, N.Y. 10006-3002; (212) 269-7450

| | |
|---|---|
| Total assets managed | $512,000,000 |
| Tax-exempt assets managed | $155,000,000 |
| International assets managed | 10,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 72 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 8 |

Kahn Brothers & Co. Inc. is an equity, fixed-income and balanced manager.

Its equity approach employs fundamental Graham & Dodd analysis to identify investments that have potential for value realization. Options are used.

Its fixed-income approach concentrates on higher grade credits and frequently invests in less conventional instruments to improve yield without sacrificing credit quality.

Alan Russell Kahn, president, is chief investment officer; Thomas Graham Kahn, executive vice president, is client contact.

## Daniel S. Kampel Associates

115 Broadway, New York, N.Y. 10006; (212) 233-9410

| | |
|---|---|
| Total assets managed | $540,000,000 |
| Tax-exempt assets managed | $533,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 20 |
| Types of accounts managed | CPJ |
| No. of portfolio managers | 4 |

Daniel S. Kampel Associates Inc. is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented, focusing on growth and emerging growth stocks and using sector rotation. Its fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 43% stocks, 45% bonds and 12% cash.

It follows 30 to 40 stocks closely and 90 to 100, generally; 25% of research is generated internally.

Clients include New York Hotel Trades Council, Contel and Bakery Drivers Local 550.

Daniel S. Kampel is chief investment officer and client contact.

## Kangyo Kakumaru Capital Management Corp.

1 World Financial Center 18th Floor, New York, N.Y. 10281; (212) 587-7654

| | |
|---|---|
| Total assets managed | $78,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $1,000,000 |
| No. of portfolio managers | 14 |
| Size of research staff | 54 |

Kangyo Kakumaru Capital Management Corp. is an equity, fixed-income, balanced and international manager.

Its equity approach emphasizes growth and emerging growth stocks and market timing. Its fixed-income approach is driven by interest rate anticipation and sector analysis.

The firm follows 30 stocks closely; all research is generated internally.

The parent company is Kangyo Kakumaru Research Institute Inc.

Etsuo Ogiwara, president, is chief investment officer and client contact.

## Kanne, Paris & Hoban Inc.

135 S. LaSalle St., Chicago, Ill. 60603; (312) 372-2255

| | |
|---|---|
| Total assets managed | $120,000,000 |
| Tax-exempt assets managed | $70,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 59 |
| Types of accounts managed | CE |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

Kanne, Paris & Hoban Inc., an equity manager, takes a conservative and risk-adverse investment approach, emphasizing Graham & Dodd analysis to identify and invest in undervalued equities. It invests in companies with large market capitalization and strong profit performance that are overlooked by the market.

The firm follows 400 stocks closely and 12,000, generally. All research is generated internally.

Jeffrey E. Kanne is the chief investment officer; Ernest J. Dunston is the client contact.

## Karpus Investment Management

5 Tobey Village Office Park, Pittsford, N.Y. 14634; (716) 586-4680

| | |
|---|---|
| Total assets managed | $81,000,000 |
| Tax-exempt assets managed | $13,000,000 |
| Dedicated funds managed | 6,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 17 |
| Types of accounts managed | CEPJ |
| No. of portfolio managers | 3 |
| Size of research staff | 4 |

Karpus Investment Management is an equity, fixed-income and balanced manager.

Its equity approach involves fundamental research and playing the discounts to net asset value on closed-end mutual funds.

Its fixed-income approach uses sector, yield curve and duration strategies along with a small amount of interest rate anticipation. Portfolios are structured around a variety of securities, with the emphasis on Treasuries.

The parent company is Karpus Management Inc.

George W. Karpus, president, is chief investment officer; Jo Ann Van DeGriff, vice president, is client contact.

## Karsten Realty Advisors

12121 Wilshire Blvd. Suite 900, Los Angeles, Calif. 90025; (213) 826-0035

| | |
|---|---|
| Total assets managed | $1,250,000,000 |
| Tax-exempt assets managed | $547,000,000 |
| Real estate assets managed | $547,000,000 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients | 20 |
| Types of accounts managed | CFG |

Karsten Realty Advisors, a real estate manager, emphasizes equity ownership and equity-oriented mortgages either wholly owned or joint ventures in existing properties, forward commitments and development projects. It focuses on office, industrial, R&D and retail properties in the West and Southwest.

The asset mix Jan. 1 was 76% equity real estate and 24% mortgages.

The parent company is First Interstate Bancorp.

Clients include TREET, Ohio State Teachers, Screen Actors Guild Producers and Nevada Public Employees.

A. Redmond Doms Jr., managing principal, is chief investment officer; John M. Lundsten and Hugh G. Hilton, principals, are client contacts.

## KAS Investment Consultants

13005 S.E. 46th St., Bellevue, Wash. 98006; (206) 641-7645

| | |
|---|---|
| Total assets managed | $6,000,000 |
| Tax-exempt assets managed | $2,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 6 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |

KAS Investment Consultants is an equity, fixed-income and balanced manager.

Its equity approach focuses on stocks with strong fundamental value identified by market screens and research. Low p/e stocks, market timing and Graham & Dodd analysis are employed.

Its fixed-income approach is driven by interest rate anticipation. Credit condition, economic forecasts and markets are reviewed.

Clients include J.S. Whaley and Ad-Gage Research.

R.J. Wells-Henderson is chief investment officer; Richard L. Wilkins is client contact.

## Kemper Financial Services

120 S. LaSalle St., Chicago, Ill. 60603; (312) 845-1288

| | |
|---|---|
| Total assets managed | $43,941,000,000 |
| Tax-exempt assets managed | $2,628,000,000 |
| 401(k)/457 assets managed | $96,000,000 |
| 401(k)/457 clients | 2 |
| International assets managed | $99,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 46 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 20 |
| Size of research staff | 22 |

Kemper Financial Services is an equity, fixed-income, balanced and high-yield manager.

Its equity approach is fundamental, selecting individual stocks possessing superior earnings growth potential at valuations that underestimate that growth.

Its fixed-income approach follows a sector allocation style that emphasizes issuer selection within a controlled framework of plus or minus 25% of the duration of the Shearson Lehman Hutton Government/Corporate bond index.

Options, stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 60.1% stocks, 28.1% bonds and 11.8% cash.

Its subsidiary, Kemper-Murray Johnstone International, manages the $97.2 million in foreign stocks and $1.7 million in foreign bonds.

The parent company is Kemper Financial Corp.

Clients include Arlington County Employees, Illinois Teachers, Great Northern Nekoosa and Rochester Gas & Electric.

Stephen B. Timbers is chief investment officer; Gary S. Klem is client contact.

## Kempner Capital Management Inc.

P.O. Box 119, Galveston, Texas 77553; (409) 765-6671

| | |
|---|---|
| Total assets managed | $351,000,000 |
| Tax-exempt assets managed | $82,000,000 |
| International assets managed | 19,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 8 |
| Types of accounts managed | CEPJ |
| No. of portfolio managers | 2 |

Kempner Capital Management Inc., an equity manager, emphasizes Graham & Dodd analysis and low p/e stocks with limited downside risk and with expansion in growth, earnings and p/e multiples expected in three to five years. Options are used.

In fixed-income, it takes a passive approach, buying high-quality, full-faith-and-credit governments.

The firm follows 100 stocks closely and 500, generally; 10% of research is generated internally.

Harris L. Kempner Jr., president, is chief investment officer; Donna Ginn, vice president, is client contact.

## Kennedy Associates Inc.

2400 Financial Center, Seattle, Wash. 98161; (206) 624-9640

| | |
|---|---|
| Total assets managed | $3,300,000,000 |
| Tax-exempt assets managed | $3,300,000,000 |
| Real estate assets managed | $880,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 62 |
| Types of accounts managed | JG |
| No. of portfolio managers | 9 |
| Size of research staff | 3 |

Kennedy Associates Inc. is an equity, fixed-income, balanced and real estate manager.

For equities, growth stocks and sector rotation are emphasized to capitalize on investments' long-term prospects by combining each client's objectives with technical and fundamental research. Options are used.

Fixed-income investments are based on the firm's evaluation of the interest rate cycle and its relationship to the business cycle and economic outlook to maximize expected performance of investments.

Its real estate approach takes equity positions in general-purpose, multitenant, commercial properties nationwide.

The asset mix Jan. 1 was 31% stocks, 15% bonds, 6% cash, 24% equity real estate, 2% mortgages and 22% mortgage-backed securities.

The firm follows 250 stocks closely and 400, generally; 50% of the research is generated internally.

Clients include Alameda County, New York City, International Ironworkers and International Brotherhood of Painters & Allied Trades.

Duff Kennedy is chief investment officer; Roger V. Kelly, senior vice president, is client contact.

## Kennedy Capital Management Inc.

425 N. New Ballas Road Suite 181, St. Louis, Mo. 63141-6821; (314) 432-0400

| | |
|---|---|
| Total assets managed | $111,000,000 |
| Tax-exempt assets managed | $105,000,000 |
| Minimum separate account | $200,000 |
| Tax-exempt clients | 43 |
| Types of accounts managed | CEPJ |
| No. of portfolio managers | 3 |
| Size of research staff | 3 |

Kennedy Capital Management Inc., an equity income allocation manager, takes a quantitative approach. It uses basic value/earnings momentum screens to identify stocks with the greatest growth potential combined with equity/income allocation through highly correlated accumulation/leading trend indicators.

For balanced accounts, the firm uses leading trend indicators to target risk aversion during statistically high-risk periods, moving assets into into money market funds.

Gerald T. Kennedy, president, is chief investment officer; John P. Morris, portfolio manager, is client contact.

## Key/Dunedin Worldwide Investments

60 State St., Albany, N.Y. 12207; (518) 486-8713

| | |
|---|---|
| Total assets managed | $48,000,000 |
| Tax-exempt assets managed | $48,000,000 |
| International assets managed | $31,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | CE |
| No. of portfolio managers | 8 |
| Size of research staff | 13 |

Key/Dunedin Worldwide Investments, an international and global manager, uses an approach that incorporates a long-term investment horizon emphasizing high-quality growth

**Knight, Bain, Seath & Holbrook Capital Management Inc.**

**Toronto, Canada**

is pleased to announce the formation of its United States Affiliate

**Knight, Bain, Seath, Holbrook & Partners, Inc.**

Investment Management for
Retirement, Foundation and Endowment Funds

**Andrew D. Parrillo**
*Prinicpal & Managing Director*

**10 Liberty Square, Boston, Massachusetts 02109**
**(617) 423-1100**

companies. Equal weight is placed on country/currency and stock selection. Research incorporates direct company contact and a computer data base.

The firm is a joint venture between Key Trust Co., Albany, and Dunedin Fund Managers Ltd., Edinburgh, Scotland.

Alan S. Kemp, managing director, is chief investment officer; Douglas B. Waggoner, managing director, is client contact.

### Key Trust Co.

60 State St., Albany, N.Y. 12207; (518) 486-8239

| | |
|---|---|
| Total assets managed | $1,917,000,000 |
| Tax-exempt assets managed: | |
| Total | $525,000,000 |
| Commingled | $31,000,000 |
| Separate | $494,000,000 |
| Indexed assets managed | $2,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients: | |
| Commingled | 100 |
| Separate | 350 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 12 |
| Size of research staff | 4 |

Key Trust Co. is an equity, fixed-income and balanced manager.

Its equity approach emphasizes sector rotation. Its fixed-income approach is driven by interest rate anticipation and sector analysis. Options are used.

The asset mix Jan. 1 was 45% stocks, 50% bonds and 5% cash; $2 million was in equity index funds.

The parent company is KeyCorp.

Peter A. Farrell, executive vice president, is chief investment officer; George H. Elferink, executive vice president, is client contact.

### Key Trust Co. of Maine

1 Canal Plaza, Portland, Maine 04112; (207) 874-7113

| | |
|---|---|
| Total assets managed | $481,000,000 |
| Tax-exempt assets managed: | |
| Total | $131,000,000 |
| Commingled | $17,000,000 |
| Separate | $114,000,000 |
| International assets managed | $250,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients: | |
| Commingled | 200 |
| Separate | 183 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 5 |

Key Trust Co. of Maine is an equity, fixed-income, balanced and international manager.

Its equity approach uses sector rotation and growth stocks stressing long-term management with a horizon of three to five years.

Anticipating changes in interest rates, Key Trust takes an aggressive fixed-income approach using laddered maturities with a yield curve emphasis.

The parent company is KeyCorp.

William M. Hunter III, president, is chief investment officer; Gary L. Robinson, assistant vice president, is client contact.

### Key Trust Co. of the Northwest

P.O. Box 12907, 1000 Second Ave. 11th Floor, Seattle, Wash. 98111-4907; (206) 684-6100

| | |
|---|---|
| Total assets managed | $214,000,000 |
| Tax-exempt assets managed: | |
| Total | $93,000,000 |
| Commingled | $29,000,000 |
| Separate | $64,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients: | |
| Commingled | 110 |
| Separate | 28 |
| Types of accounts managed | C |
| No. of portfolio managers | 6 |

Key Trust Co. of the Northwest, formerly Seattle Trust, is an equity, fixed-income and balanced manager.

Its equity approach offers lower-than-market risk, emphasizing common stocks and money market instruments. Selection is based on historical p/e multiples and earnings outlook. Graham & Dodd analysis is used.

Its fixed-income approach uses laddered maturities using interest rate forecasting to lengthen or shorten average portfolio maturity. Maximum average maturity is 10 years.

The parent company is KeyCorp.

Dana Harken is chief investment officer; Dorothy Bailey-Archer is client contact.

### Keystone Investment Management Corp.

99 High St., Boston, Mass. 02110; (617) 338-3600

| | |
|---|---|
| Total assets managed | $574,000,000 |
| Tax-exempt assets managed | $364,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 75 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 10 |
| Size of research staff | 3 |

Keystone Investment Management Corp. is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented, systematically screening a large data base of stocks to identify those that offer the best combination of low p/e and momentum with above-average earnings-per-share and dividend growth rates.

Its fixed-income approach is keyed to interest rate anticipation and the shape of the yield curve. Portfolios are constructed using investment-grade issues and intermediate-term average maturities.

The parent is The Travelers Corp.

Clients include Trinity Church and Technographics.

George F. Wilkins Jr., senior vice president, is chief investment officer; Robert A. Shann, vice president-director of institutional sales, is client contact.

### Kiene, Wooters & Associates Inc.

309 Clifton Ave., Minneapolis, Minn. 55403; (612) 870-8800

| | |
|---|---|
| Total assets managed | $500,000,000 |
| Tax-exempt assets managed | $463,000,000 |
| Index funds managed | 162,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 37 |
| Types of accounts managed | C |
| No. of portfolio managers | 4 |

Kiene, Wooters & Associates Inc. is an equity, fixed-income and balanced manager.

Its primary investment strategy uses derivative instruments in concert with the core equity or bond portfolio to add incremental returns of 1% to 2% or hedge the portfolio against a down market. Options, stock index futures and fixed-income futures are used.

The firms provides portfolio insurance to four clients, covering $173 million.

The firm follows 204 stocks generally.

Clients include Wisconsin Power and Light, Brown Painting, Cenex and Longyear.

Richard C. Kiene is chief investment officer; Kevin B. Erdman, director of marketing, is client contact.

### Luther King Capital Management

301 Commerce St., Suite 1600, Fort Worth, Texas 76102; (817) 332-3235

| | |
|---|---|
| Total assets managed | $2,000,000,000 |
| Tax-exempt assets managed | $1,500,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 100 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 6 |

Luther King Capital Management is an equity, fixed-income and balanced manager.

Its equity approach emphasizes companies with high sustainable return on equity assuming prudent use of leverage and companies with substantially undervalued assets and excess cash flow.

Its fixed-income approach is based on interest rate anticipation. The firm also invests in sinking fund corporate issues where the sinker is active.

The asset mix Jan. 1 was 75% stocks, 5% bonds and 20% cash.

The firm follows 100 stocks closely and 500, generally; 50% of research is generated internally.

Clients include Kimberly Clark, Notre Dame University and Fred Meyer Charitable Trust.

J. Luther King Jr, president, is chief investment officer; Emmett M. Murphy, vice president, is client contact.

### Kingsley, Jennison, McNulty & Morse Inc.

The International Building, 601 California St. Suite 700, San Francisco, Calif. 94108-2812; (415) 433-5844

| | |
|---|---|
| Total assets managed | $310,000,000 |
| Tax-exempt assets managed | $261,000,000 |
| Real estate assets managed | 13,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 41 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 6 |
| Size of research staff | 2 |

Kingsley, Jennison, McNulty & Morse Inc. is an equity, fixed-income and balanced manager.

Its equity approach is active, investing 80% of funds in quality, demonstrated growth stocks and 20% in emerging growth stocks.

Its fixed-income approach uses interest rate anticipation and sector analysis. Portfolio duration and sector weightings are varied relative to client baseline index; futures and options hedging strategies are used to manage volatility.

Richard K. Kingsley, chairman and chief executive officer, is chief investment officer; Philip W. Jonckheer, vice president, is client contact.

### Kirkpatrick, Pettis Management

1623 Farnam St. Suite 700, Omaha, Neb. 68102; (402) 449-1400

| | |
|---|---|
| Total assets managed | $192,000,000 |
| Tax-exempt assets managed | $171,000,000 |
| Real estate assets managed | $16,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 92 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 4 |
| Size of research staff | 3 |

Kirkpatrick, Pettis Management is an equity, fixed-income and balanced manager.

Its equity strategy is conservative, using a fundamental, bottom-up, value-oriented approach. Its fixed-income approach is passive.

The parent company is Kirkpatrick, Pettis, Smith, Polian Inc., a wholly owned subsidiary of Mutual of Omaha.

Rodney D. Cerny is chief investment officer; W. Bruce Remington, assistant vice president, is client contact.

### Kirr, Marbach & Co.

621 Washington St., Columbus, Ind. 47201; (812) 376-9444

| | |
|---|---|
| Total assets managed | $318,000,000 |
| Tax-exempt assets managed | $254,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 93 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

Kirr, Marbach & Co. is an equity, fixed-income and balanced manager.

Its equity approach emphasizes Graham & Dodd analysis. Its fixed-income approach is passive.

The firm follows 120 stocks closely and 300, generally; 50% of research is generated internally.

Terry B. Marbach, vice president, is chief investment officer; David M. Kirr, president, is client contact.

### Kleinwort Benson International Investment

200 Park Ave. Suite 5610, New York, N.Y. 10166; (212) 972-9315

| | |
|---|---|
| Total assets managed | $340,000,000 |
| Tax-exempt assets managed | $147,000,000 |
| International assets managed | $147,000,000 |
| Tax-exempt clients | 6 |
| Types of accounts managed | CFJ |
| No. of portfolio managers | 5 |

Kleinwort Benson International Investment Ltd. is an international manager.

Its equity approach uses growth and low p/e stocks in a bottom-up approach, stressing long-term performance with low absolute risk.

Its fixed-income approach is top-down, emphasizing interest and exchange rate anticipation and sector analysis; AA or higher securities are selected. Options, stock index futures and fixed-income futures are used.

The parent company is Kleinwort Benson Lonsdale PLC.

John F.H. Trott is chief investment officer; Julie M. Cochran, vice president, is client contact.

### Knight, Bain, Seath & Holbrook Capital Management Inc.

8 King St. E., Toronto, Ontario M5C 1B5; (416) 863-1433

| | |
|---|---|
| Total assets managed | $1,573,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,573,000,000 |
| For subsidiaries of U.S. firms | $381,000,000 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients | 55 |
| U.S. subsidiaries | 12 |
| Types of accounts managed | CEFU |
| No. of portfolio managers | 4 |
| Size of research staff | 2 |

Knight, Bain, Seath & Holbrook Capital Management Inc., a Canadian firm,


What do you call a master trustee whose client base has more than tripled since 1982?

"Aggressive. We've made the commitment to product innovation that it takes to be a leader."

Tony Terracciano

Tony Terracciano
President and Chief Operating Officer

Mellon Bank

is an equity, fixed-income and balanced manager.

Its equity approach uses Graham & Dodd analysis to identify growth and low p/e stocks. Its fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 40% Canadian stocks, 20% U.S. stocks, 35% bonds and 5% cash.

Its clients include Coca-Cola, Procter & Gamble, Dow Chemical and Northern Telecom.

D. Knight, B. Bain, H. Seath and R. Holbrook are the chief investment officers.

### KR Capital Advisors Inc.

450 Park Ave., New York, N.Y. 10022; (212) 888-6300

| | |
|---|---|
| Total assets managed | $600,000,000 |
| Tax-exempt assets managed | $540,000,000 |
| 401(k)/457 assets managed | $34,000,000 |
| 401(k)/457 clients | 2 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients | 15 |
| Types of accounts managed | CFG |
| No. of portfolio managers | 2 |

KR Capital Advisors Inc., an equity and balanced manager, has a bias toward Graham & Dodd, but takes a more opportunistic approach analyzed from a corporate finance or an entrepreneurial perspective.

The asset mix Jan. 1 was 87% stocks and 13% cash.

The firm follows 100 stocks closely and 300, generally; 80% of research is generated internally.

Clients include Allied-Signal, Baker Hughes, Schlumberger and Keck Foundation.

Edward D. Klein is the client contact.

### Kreger Capital Management

20180 Governors Highway, Olympia Fields, Ill. 60461; (312) 481-1314

| | |
|---|---|
| Total assets managed | $22,000,000 |
| Tax-exempt assets managed | $14,000,000 |
| Real estate assets managed | $800,000 |
| Minimum separate account | $50,000 |
| Tax-exempt clients | 23 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Kreger Capital Management is an equity, fixed-income, balanced and real estate manager.

Its equity approach is 70% reliance on market timing, 20% on industry selection and 10% on individual stock selection.

Its fixed-income approach uses interest rate anticipation.

D.F. Kreger, president, is chief investment officer and client contact.

### KRM Management

400 Montgomery St. Suite 700, San Francisco, Calif. 94104; (415) 434-2850

| | |
|---|---|
| Total assets managed | $81,000,000 |
| Tax-exempt assets managed | $52,000,000 |
| International assets managed | 3,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 40 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 3 |
| Size of research staff | 3 |

KRM Management is an equity, fixed-income and balanced manager.

Its equity approach is conservative, emphasizing dividend income and preservation of capital. It uses sector rotation with quality growth, emerging growth and low p/e stocks as well as convertible securities. It also writes covered calls.

Its fixed-income approach combines interest rate anticipation and sector analysis. Portfolios generally are limited to government bonds and the highest-rated, best quality corporate or municipal bonds. Convertibles are used.

William C. Kuehne is chief investment officer; James S. Anderson is client contact.

### Kunath Karren Rinne & Atkin

4000 Key Tower, 1000 Second Ave., Seattle, Wash. 98104-1054; (206) 621-7400

| | |
|---|---|
| Total assets managed | $167,000,000 |
| Tax-exempt assets managed | $25,000,000 |
| Real estate assets managed | $3,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 29 |
| Types of accounts managed | C |
| No. of portfolio managers | 4 |

Kunath Karren Rinne & Atkin Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses sector rotation and market-timing techniques. The firm emphasizes asset preservation. Portfolios are designed and weighted according to broad market themes.

Its fixed-income portfolios are constructed within a maturity schedule employing Treasury securities, corporates, convertibles, preferreds and high-yield common stocks. Options are used.

Jeffrey Atkin is chief investment officer; S. Michael Kunath is client contact.

### Kurtz Capital Management

P.O. Box 461, Livingston, N.J. 07039; (201) 226-7500

| | |
|---|---|
| Total assets managed | $125,000,000 |
| Tax-exempt assets managed | $122,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 9 |
| Types of accounts managed | CJ |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

Kurtz Capital Management, an equity manager, focuses on small-capitalization, low p/e and moderate growth stocks.

Stock index futures are used.

The firm follows 100 stocks closely and 200, generally; 70% of the research is generated internally.

Clients include Allied-Signal, Squibb and Monsanto.

Raymond J. Kurtz is the chief investment officer and the client contact.

## L

### Laketon Investment Management

P.O. Box 31 Royal Bank Plaza, Toronto, Ontario M5J 2J1; (416) 868-1380

| | |
|---|---|
| Total assets managed | $670,000,000 |
| Tax-exempt assets managed: | |
| Total | $600,000,000 |
| For subsidiaries of U.S. firms | $50,000,000 |
| Minimum separate account | $2,500,000 |
| Tax-exempt clients | 24 |
| U.S. subsidiaries | 1 |
| Types of accounts managed | CEGU |
| No. of portfolio managers | 5 |

Laketon Investment Management, a Canadian firm, is an equity, fixed-income and balanced manager.

Its equity approach is to invest 50% in the current business cycle sector, 20% to 25% in Graham & Dodd sector and 25% to 30% in special situations with superior managers.

Its fixed-income approach uses sector analysis and active management to take advantage of anomalies in the market. A fundamental approach is based on economic analysis and interest rate anticipation.

The asset mix Jan. 1 was 40% Canadian stocks, 5% U.S. stocks, 45% bonds and 10% cash.

Alden S. White, managing partner, is chief investment officer and client contact.

### Landauer Advisors Inc.

335 Madison Ave., New York, N.Y. 10017; (212) 687-2323

| | |
|---|---|
| Total assets managed | $712,000,000 |
| Tax-exempt assets managed | $113,000,000 |
| Real estate assets managed | $113,000,000 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 5 |
| Types of accounts managed | C |
| No. of portfolio managers | 4 |
| Size of research staff | 5 |

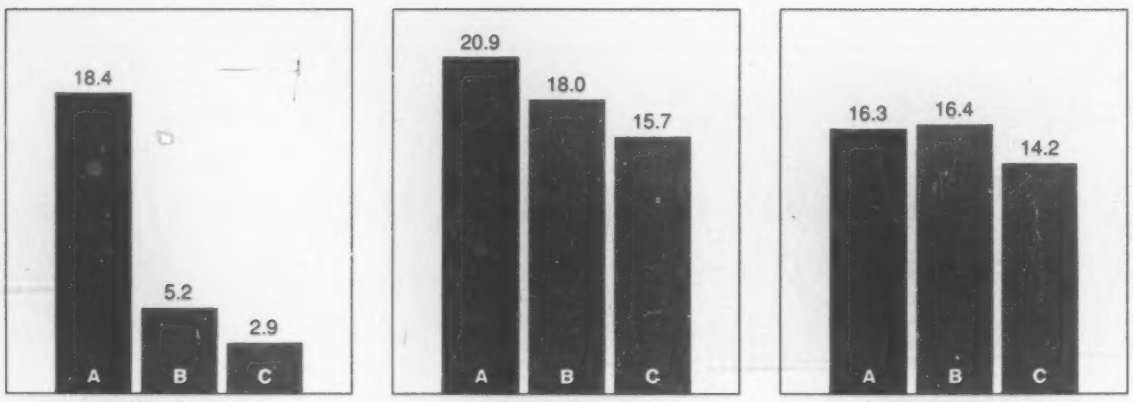
Landauer Advisors Inc., a real estate manager, uses research and proprietary data to acquire investments before they are known to the general market. All properties are subject to an intensive entrepreneurial asset management program to assure long-term profitability.

The firm generates 75% of its research internally.

The parent company is Landauer Associates Inc.

Frank B. McBrearity Jr., president, is


# Another trust ad with pretty pictures.




1987 Performance | 3-Year Performance | 5-Year Performance

Percentage rates of return:
**A** MTrust Stock Fund
**B** S&P 500
**C** CDA Universe Median Manager

Our pretty pictures may not be the same as the other guys, but we think you'll find them quite attractive. Because when you're looking for a company to manage your employee benefit plans, you want facts. Not fluff.

As you can see, in last year's challenging market our stock fund performance more than tripled the S&P 500 and CDA Universe returns. This places the fund in the top 1% of over 310 bank pooled common stock funds in the CDA Universe. And the charts speak for themselves about the consistency of our performance. As for day-to-day administration of employee benefit plans in the areas of trustee services, plan administration and participant recordkeeping, nobody performs better.

This outstanding performance is the result of our staff of experienced professionals. People who deliver a full range of employee benefit services using the resources available through our own advisory companies – MSecurities, MRealty and MPetroleum. And unlike a lot of trust companies, you have direct access to our trust professionals – when you need them.

It's the kind of service that's made us one of the nation's leading trust organizations. So give us a call. Because not many trust companies can show you pictures as pretty as ours.

MTrust
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Member MCorp

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San Antonio (512) 271-8632 • Austin (512) 479-5123 • El Paso (915) 546-4358

chief investment officer; Peter A. Peyser, senior vice president, is client contact.

### LaSalle Advisors Ltd.

11 S. LaSalle St., Chicago, Ill. 60603; (312) 782-5800

| | |
|---|---|
| Total assets managed | $2,100,000,000 |
| Tax-exempt assets managed | $2,100,000,000 |
| Real estate assets managed | $2,100,000,000 |
| Minimum separate account | $75,000,000 |
| Tax-exempt clients | 63 |
| Types of accounts managed | CFG |

LaSalle Advisors Ltd., a real estate manager, makes equity purchases of larger high-quality office buildings, shopping centers and industrial parks with the objective of producing superior returns through aggressive management with its own professional on-site management.

All tax-exempt assets were in equity real estate Jan. 1.

Clients include Bell Atlantic, American Red Cross, International Paper and Florida Board of Administration.

The parent is LaSalle Partners Ltd.

The chief investment officer is Kenneth M. Campia, president. The client contacts are Christopher J. Burke, Midwest; Hugh Reams, Southeast; William N. Thompson, West; and Steven L. Wagner, East.

### LaSalle National Bank

135 S. LaSalle, Chicago, Ill. 60690; (312) 443-2497

| | |
|---|---|
| Total assets managed | $1,400,000,000 |
| Tax-exempt assets managed: | |
| Total | $855,000,000 |
| Commingled | $500,000,000 |
| Separate | $355,000,000 |
| 401(k)/457 assets managed | $150,000,000 |
| 401(k)/457 clients | 100 |
| Real estate assets managed | $40,000,000 |
| International assets managed | $2,000,000 |
| Indexed assets managed | $2,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients: | |
| Commingled | 200 |
| Separate | 20 |
| Types of accounts managed | CJ |
| No. of portfolio managers | 9 |
| Size of research staff | 7 |

LaSalle National Bank, formerly ABN/LaSalle, is an equity, fixed-income, balanced, global/international and GIC manager.

Using an equity approach based on growth stock, Graham & Dodd and quantitative principles, it offers a family of quantitatively driven products.

The fixed-income approach is based on interest rate anticipation and sector analysis. It establishes a yardstick, then constructs a portfolio with a yield advantage and positive convexity. Duration is managed based on rate forecasts.

The asset mix Jan. 1 was 25% stocks, 60% fixed income, 10% cash and 5% mortgage-backed securities; $2 million was in equity index funds.

The parent company is ABN.

B. Meyer, vice president, is chief investment officer; James Sullivan, senior vice president, is client contact.

### Lateef Management Associates

500 Sansome St. Suite 808, San Francisco, Calif. 94111; (415) 981-2102

| | |
|---|---|
| Total assets managed | $150,000,000 |
| Tax-exempt assets managed | $100,000,000 |
| Tax-exempt clients | 80 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 4 |
| Size of research staff | 1 |

Lateef Management Associates is an equity, fixed-income and balanced manager.

The firm selects individual equities on the basis of earnings acceleration, the potential for asset revaluation and group/sector attractiveness. It favors a flexible equity strategy. Options are used. The firm does not draw a sharp line between equity and fixed-income; its conservative portfolios are supplemented with convertible securities and selected equity holdings.

Khateeb A. Lateef, general partner, is chief investment officer and client contact.

**Key to abbreviations**

C: Corporate account
E: Educational endowments
F: Private foundations
G: U.S. state and local gov'ts
J: Jointly trusteed
P: Canadian provincial gov'ts
U: Unions (Canadian firms only)

### Latimer & Buck Real Estate Advisors

121 S. Broad St., Philadelphia, Pa. 19107; (215) 385-3921

| | |
|---|---|
| Total assets managed | $1,250,000,000 |
| Tax-exempt assets managed | $1,250,000,000 |
| Real estate assets managed | $1,250,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | G |

Latimer & Buck Real Estate Advisors, a real estate manager, concentrates on equity-oriented investments using participating and convertible mortgages and joint-venture structures.

The asset mix Jan. 1 was 60% equity real estate and 40% mortgages.

The parent company is First Fidelity Bancorp.

Clients include Pennsylvania Public School Employes' and Pennsylvania State Employes'.

Douglas S. Callantine is chief investment officer and client contact.

### WR Lazard & Co.

40 Rector St., New York, N.Y. 10006; (212) 406-5855

| | |
|---|---|
| Total assets managed | $918,000,000 |
| Tax-exempt assets managed | $908,000,000 |
| Index funds managed | $906,000,000 |
| Dedicated funds managed | $2,000,000 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients | 9 |
| Types of accounts managed | CFJG |
| No. of portfolio managers | 3 |
| Size of research staff | 1 |

WR Lazard & Co., an equity and fixed-income manager, uses an approach that is passive and designed to reduce portfolio risk. Expected risk/return characteristics are tailored through flexibility in defining the stock or fixed-income universe against which to index. In fixed income, it also offers immunization and liability/cash flow-matched strategies.

Of the assets under management, $765 million is managed by a consortium of WR Lazard and Smith Barney Harris Upham.

The asset mix Jan. 1 was 98% bonds, 1% cash and 1% mortgage-backed securities; $906 million was in bond indexed funds of which $5 million was in mortgage-backed securities.

Clients include Avon Products, Consolidated Edison and D.C. Retirement.

Frankie D. Hughes is chief investment officer; Edward M. Swan Jr. is client contact.

### Lazard Freres Asset Management

1 Rockefeller Plaza, New York, N.Y. 10020; (800) 228-0203

| | |
|---|---|
| Total assets managed | $8,803,000,000 |
| Tax-exempt assets managed | $7,550,000,000 |
| 401(k)/457 assets managed | $70,000,000 |
| 401(k)/457 clients | 5 |
| Real estate assets managed | $500,000,000 |
| International assets managed | $200,000,000 |
| Dedicated funds managed | $300,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 170 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 21 |
| Size of research staff | 6 |

Lazard Freres Asset Management is an equity, fixed-income, balanced and international manager.

Its equity approach uses proprietary research to discover and validate stocks where it received more (high return on equity and assets) than it paid for (price/book value).

Its fixed-income approach manages accounts with a total return orientation. Valuation techniques are used to restructure the coupon, sector and maturity of portfolios.

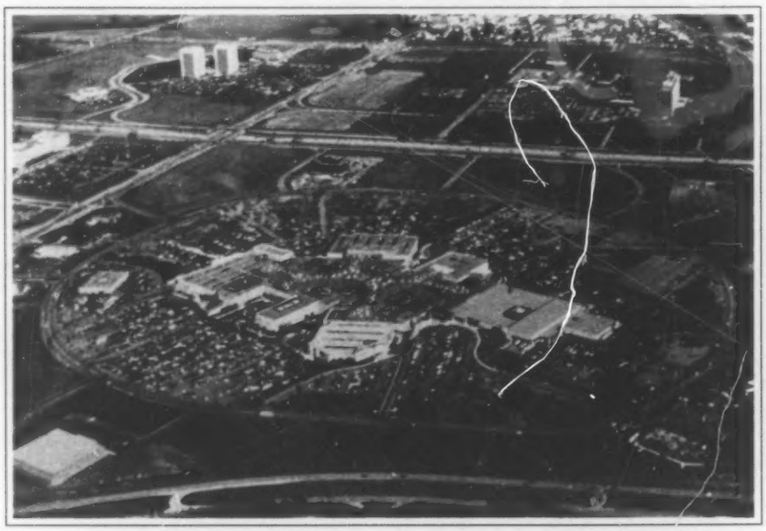
Strategy is implemented through risk-reward analysis.

The asset mix Jan. 1 was 75% stocks, 20% bonds and 5% cash. As of the same date, the firm had $500 million in mortgage-backed securities and $200 million in foreign stocks.

*LaSalle Advisors Limited*

*Real Estate Investment Advisor to Qualified Tax-exempt Institutions*

*Over $2,000,000,000 Under Management*



*LaSalle Advisors Limited purchased this 1.5 million square foot regional shopping center on behalf of one of its pension fund clients. This premier center is fully leased to a quality group of national tenants, anchored by Hudson's, J.C. Penney, Lord & Taylor, Saks Fifth Avenue and Sears.*

*LA SALLE ADVISORS*
*Limited*
*Real Estate Advisory Services*
*Chicago, Illinois 60603*

*A Subsidiary of LaSalle Partners Limited*

The parent company is Lazard Freres & Co.

Clients include General Motors and California Public Employees.

Herbert W. Gullquist is the chief investment officer; Anthony J. Dote and Mark W. Hamilton, vice presidents, are the client contacts.

## R.M. Leary & Co. Inc.

3300 E. First Ave. Suite 380, Denver, Colo. 80206; (303) 320-1063

| | |
|---|---|
| Total assets managed | $17,000,000 |
| Tax-exempt assets managed | $15,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 68 |
| Types of accounts managed | CFJ |
| Size of research staff | 2 |

R.M. Leary & Co. Inc. is a balanced manager and mutual fund market timer.

Its equity approach uses market timing in an aggressive common stock fund during rising markets and defensive positions in a bond or money market fund during declining markets.

Its fixed-income approach uses interest rate anticipation. Bearish markets dictate a defensive move to money market funds that pay average competitive returns.

Clients include Caney Valley Electric Co-op and La Junta Medical Center.

Kate Leary Lee is the chief investment officer and the client contact.

## Leavy Investment Management Inc.

6400 Powers Ferry Road Suite 102, Atlanta, Ga. 30339; (404) 951-9314

| | |
|---|---|
| Total assets managed | $375,000,000 |
| Tax-exempt assets managed | $370,000,000 |
| Dedicated funds managed | $54,000,000 |
| Tax-exempt clients | 30 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

Leavy Investment Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented, focusing on identifying well-run, financially sound companies whose stock is temporarily depressed because of short-term actual or anticipated disappointments.

Its fixed-income approach seeks stability of return, protection of principal value and current income. Maturity is adjusted gradually in response to interest rate levels, both absolute and relative. Emphasis is on A or better rated intermediate maturities.

The firm follows 130 stocks closely and 3,600, generally; 20% of the research is generated internally.

John M. Leavy, president, is chief investment officer; Barbara A. Reiser, executive vice president, is client contact.

## Lee, Robinson & Steine Inc.

First American Center, Nashville, Tenn. 37238; (615) 748-2893

| | |
|---|---|
| Total assets managed | $3,500,000,000 |
| Tax-exempt assets managed | $1,400,000,000 |
| 401(k)/457 assets managed | $30,000,000 |
| 401(k)/457 clients | 12 |
| International assets managed | $20,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 140 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 8 |
| Size of research staff | 1 |

Lee, Robinson & Steine Inc. is an equity, fixed-income, balanced and GIC manager.

Its equity approach uses sector rotation, market timing and quantitative analyses. The fixed-income approach is based on interest rate anticipation.

The asset mix Jan. 1 was 55% stocks and 45% bonds.

The firm follows 175 stocks closely and 400, generally; 10% of the research is generated internally.

The parent company is First American Trust Co.

Clients include United Cities Gas, Tennessee Performing Arts Foundation, and David Lipscomb College Endowment.

Charles H. Robinson, president, is the chief investment officer; Frank M. Bass is the client contact.

Master trust: Aug. 22.

## Legg Mason Capital Management Inc.

111 S. Calvert St., Baltimore, Md. 21203; (301) 547-2558

| | |
|---|---|
| Total assets managed | $350,000,000 |
| Tax-exempt assets managed | $160,000,000 |
| Real estate assets managed | $8,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 100 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 4 |

Legg Mason Capital Management Inc. is an equity, fixed-income and balanced manager.

The firm adheres to a bioad, bottom-up, value-oriented equity approach that uses common stocks and convertibles to increase the consistency of returns and create more opportunities for compounding.

For fixed income, the firm follows a relative-value approach, buying securities in market sectors that appear undervalued on a historical basis.

The parent is Legg Mason Inc.

Peter A. Lareau is chief investment officer; Terrence D. Woulfe is client contact.

## Lehman Management Co.

55 Water St., New York, N.Y. 10041; (212) 668-4073

| | |
|---|---|
| Total assets managed | $16,077,000,000 |
| Tax-exempt assets managed | $11,920,000,000 |
| Real estate assets managed | $450,000,000 |
| Index funds managed | $2,000,000,000 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 156 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 21 |
| Size of research staff | 13 |

Lehman Management Co. Inc. is an equity, fixed-income, balanced, bond index and special situations equity manager.

Its equity approach for corporate funds is to purchase growth-oriented securities that sell at reasonable prices. For Taft-Hartley funds, the emphasis is on a contrarian, value-oriented approach.

For fixed income, it offers active and passive strategies. Its active approach is conservative, emphasizing high-quality intermediate securities and minimizing interest rate risk. The index products are customized, emphasizing controlled maturity movements while adding value through security selection and sector rotation.

Options, stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 37% stocks, 54% bonds (including mortgage-backed securities) and 9% cash; $450 million was in mortgage-backed securities.

The parent is Shearson Lehman Hutton Inc., an American Express Co. unit.

C. Charles Hetzel and Coleman C. Brandt are chief investment officers; H. Scott Higgins, executive vice president, is the client contact.

## Lehndorff & Babson Real Estate Counsel

2501 Cedar Springs Suite 550, Dallas, Texas 75201; (214) 855-5800

| | |
|---|---|
| Total assets managed | $2,000,000,000 |
| Tax-exempt assets managed | $948,000,000 |
| Real estate assets managed | $948,000,000 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 38 |
| Types of accounts managed | CJG |

Lehndorff & Babson Real Estate Counsel, a real estate manager, invests in larger office and retail properties chosen for the potential to create value through management during a five- to 15-year holding period.

All assets were in equity real estate Jan. 1.

Clients include Ameritech, Stanford University, California State Teachers and Eastman Kodak.

M. Thomas Lardner, chairman, is chief investment officer; James S. White, executive vice president, is client contact.

## Leith Wheeler Management

Box 10365 Pacific Centre, 609 Granville St. Suite 1930, Vancouver, British Columbia V7Y 1G5; (604) 683-3391

| | |
|---|---|
| Total assets managed | $200,000,000 |
| Tax-exempt assets managed: | |
| Total | $120,000,000 |
| For subsidiaries of U.S. firms | $16,000,000 |
| Minimum separate account | $750,000 |
| Tax-exempt clients | 14 |
| U.S. subsidiaries | 1 |
| Types of accounts managed | CFU |
| No. of portfolio managers | 4 |
| Size of research staff | 1 |

Leith Wheeler Management Ltd., a Canadian firm, is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented using low p/e and Graham & Dodd principles. Its fixed-income approach uses interest rate anticipation with emphasis on short- to medium-term securities.

M. V. Leith is chief investment officer; Brian Scott and Mr. Leith are client contacts.

## Leland O'Brien Rubinstein Associates Inc.

P.O. Box 71970, Los Angeles, Calif. 90071-0970; (213) 614-3173

Leland O'Brien Rubinstein Associates Inc. is a portfolio insurance manager. The firm would not disclose any information.

Options, stock index futures and fixed-income futures are used in its strategies.

Larry D. Edwards, president, is chief investment officer; John W. O'Brien, chairman and chief executive officer, is client contact.

## The Leonard Management Group

407 W. Avon Road, Avon, Conn. 06001; (203) 673-3237

| | |
|---|---|
| Total assets managed | $25,000,000 |
| Tax-exempt assets managed | $15,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 6 |
| Types of accounts managed | CEG |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

The Leonard Management Group, a balanced manager, applies a top-down approach to asset allocation and a bottom-up, value-oriented discipline to security selection. Portfolios are overweighted within asset groups offering the highest risk-adjusted returns. Options are used.

The firm follows 50 stocks closely and 500, generally; 25% of research is generated internally.

James P. Leonard, president, is chief investment officer and client contact.

## Lesesne & Co. Inc.

3414 Peachtree Road N.E. Suite 820, Atlanta, Ga. 30326; (404) 261-8200

| | |
|---|---|
| Total assets managed | $58,000,000 |
| Tax-exempt assets managed | $50,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 44 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

Lesesne & Co. Inc., a balanced manager, emphasizes market timing in its equity approach and interest rate anticipation in its fixed-income approach.

All research is generated internally.

Brannon B. Lesesne Jr., president, is chief investment officer; Brannon B. Lesesne III, vice president, is client contact.

## John A. Levin & Co. Inc.

1 Rockefeller Plaza 25th Floor, New York, N.Y. 10020; (212) 408-2800

| | |
|---|---|
| Total assets managed | $500,000,000 |
| Tax-exempt assets managed | $250,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 23 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 2 |
| Size of research staff | 3 |

John A. Levin & Co. Inc., an equity manager, seeks diverse companies with market liquidity that dominate their niche, are inexpensive relative to cash flows/asset value, or have new products or developments. Disciplined price parameters are enforced.

The firm follows 50 stocks closely and 200, generally; 75% of the research is generated internally.

The parent is Loeb Holding Corp.

John A. Levin, president, is chief investment officer; Robert Bowers is client contact.

## Lexington Management

Park 80 West Plaza II, Saddle Brook, N.J. 07662; (201) 845-7300

| | |
|---|---|
| Total assets managed | $2,152,000,000 |
| Tax-exempt assets managed | $720,000,000 |
| 401(k)/457 assets managed | $35,000,000 |
| 401(k)/457 clients | 21 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 46 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 8 |
| Size of research staff | 18 |

Lexington Management Corp. is an equity, fixed-income, balanced and global manager.

Its equity approach stresses relative value analysis. Seeking to preserve capital and earn a real rate of return, the firm will increase or decrease equity exposure based upon an analysis of risk factors in the investment environment.

Its fixed-income approach uses interest rate anticipation and duration to manage portfolios; its neutral position is very defensive.

Options are used.

The asset mix Jan. 1 was 44% stocks, 35% bonds and 21% cash.

The parent company is Piedmont Management.

William S. Stack is the chief investment officer; Joseph Barcic Jr., chief operating officer, is the client contact.

## Leylegian Investment Inc.

855 Oak Grove Ave. Suite 200, Menlo Park, Calif. 94025; (415) 325-1055

| | |
|---|---|
| Total assets managed | $275,000,000 |
| Tax-exempt assets managed | $275,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 17 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 3 |

Leylegian Investment Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses growth and low p/e stocks and sector rotation techniques. It uses a global top-down economic overview with heavy industry emphasis and follows a sell discipline.

Its fixed-income approach uses interest rate anticipation.

The firm follows 35 stocks closely and 150, generally; 90% of research is generated internally.

Jack H. Leylegian II is chief investment officer; Dorothy Leylegian is client contact.

## Liberty Capital Management

11 Broadway Suite 1066, New York, N.Y. 10004; (212) 509-0550

| | |
|---|---|
| Total assets managed | $405,000,000 |
| Tax-exempt assets managed | $227,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 59 |
| Types of accounts managed | CFJG |
| No. of portfolio managers | 3 |

Liberty Capital Management Inc., a fixed-income manager, uses quantitative, risk-averse management of U.S. Government securities to produce capital gains during periods of price strength. Options on futures can be used to enhance returns.

All tax-exempt assets were in bonds Jan. 1.

Clients include Coleman, Cleveland Clinic, Consolidated Papers and ILGWU.

Jonathan Leader, president, is chief investment officer; Susan Thompson, marketing manager, is client contact.

## Liberty Life Assurance Co. of Boston

175 Berkeley St., Boston, Mass. 02117; (617) 357-9500

| | |
|---|---|
| Total assets managed | $513,000,000 |
| Tax-exempt assets managed: | |
| Total | $513,000,000 |
| Pooled accounts | $139,000,000 |
| GICs | $3,000,000 |
| Annuities | $346,000,000 |
| Other | $25,000,000 |
| 401(k)/457 assets managed | $3,000,000 |
| Real estate assets managed | $1,000,000 |
| Tax-exempt clients | 5 |
| Types of accounts managed | C |
| No. of portfolio managers | 5 |
| Size of research staff | 11 |

Liberty Life Assurance Co. of Boston is an equity and fixed-income manager.

Its equity approach is value-oriented, emphasizing Graham & Dodd analysis to target high-quality, large-cap growth stocks.

Its fixed-income approach uses sector analysis. Portfolios will be structured to preserve principal selected on a relative value basis to provide balanced maturity distribution.

The separate account asset mix Jan. 1 was 44% stocks, 16% bonds, 8% cash and 32% mortgage-backed securities.

The parent company is Liberty Mutual Insurance Co.

D.M. Burgess, senior vice president, is chief investment officer; Michael Ashwood, vice president-benefit sales, is client contact.

## Liberty National Bank and Trust Co.

P.O. Box 32500, Louisville, Ky. 40232; (502) 566-2000

| | |
|---|---|
| Total assets managed | $1,792,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,043,000,000 |
| Commingled | $171,000,000 |
| Separate | $912,000,000 |
| 401(k)/457 assets managed | $23,000,000 |
| 401(k)/457 clients | 25 |
| Real estate assets managed | $217,000,000 |
| Dedicated assets managed | $10,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 457 |
| Separate | 416 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 9 |
| Size of research staff | 2 |

Liberty National Bank and Trust Co. is an equity, fixed-income, balanced and dedicated/immunized portfolio manager.

Its equity approach uses market timing and is value-oriented, defined generally by high yield, low p/e, low beta, absolute price to book, earnings predictability and a willingness to switch investment focus.

Its fixed-income philosophy seeks below-average risk, but portfolios are fully managed to reflect changing risk-reward ratios.

The asset mix Jan. 1 was 30% stocks, 40% bonds, 10% cash and 20% mortgage-backed securities. It manages nominal amounts in equity real estate and equity index accounts.

Clients include Blue Cross and Blue Shield of Kentucky, Kentucky Baptist Foundation and UFCW Local 227.

The parent company is Liberty National Bancorp Inc.

Robert C. Gray, senior vice president, is the chief investment officer; Madison C. McCarty, trust officer, is the client contact.

## Lieber & Co.

550 Mamaroneck Ave., Harrison, N.Y. 10528; (914) 698-5711

| | |
|---|---|
| Total assets managed | $2,761,000,000 |
| Tax-exempt assets managed | $672,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 47 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 5 |
| Size of research staff | 11 |

Lieber & Co., an equity manager, emphasizes growth, emerging growth and low p/e stocks. The firm is fundamentally research-oriented, concentrating on income and/or undervalued issues.

The asset mix Jan. 1 was 94% stocks, 1% bonds and 5% cash.

It follows 500 stocks closely and 500, generally; all research is generated internally.

Clients include Texas Instruments and Minnesota State Board.

Stephen A. Lieber, senior partner, is chief investment officer; Nola M. Falcone, general partner, is client contact.

## Lieberman Cos.

199 Middle Neck Road, Great Neck, N.Y. 11021; (516) 466-6565

| | |
|---|---|
| Total assets managed | $300,000,000 |
| Tax-exempt assets managed | $120,000,000 |
| Real estate assets managed | $120,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |

Lieberman Cos., a real estate man-

ager, bases investments on current income plus capital appreciation.

Bruce R. Lieberman, president, is chief investment officer and client contact.

### Life Insurance Co. of Georgia

P.O. Box 105006, Atlanta, Ga. 30348; (404) 980-5624

| | |
|---|---|
| Total assets managed | $1,600,000,000 |
| Tax-exempt assets managed: | |
| Total | $330,000,000 |
| Pooled accounts | $34,000,000 |
| GICs | $100,000,000 |
| Annuities | $90,000,000 |
| Other | $106,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | CG |
| No. of portfolio managers | 5 |
| Size of research staff | 3 |

Life Insurance Co. of Georgia is an equity, fixed-income and GIC manager.

Its equity approach is quantitative. Its economic sector emphasis is based on a relative valuation model of expectational earnings and historical data. Stocks are selected through a model emphasizing cash flow analysis.

Its fixed-income approach uses interest rate anticipation and analyzes the shape of the yield curve and sector spreads for risk/return potential.

Jay Yelton, president of The Investment Centre Inc., the insurer's investment advisory affiliate, is chief investment officer; Mike Ham, senior vice president of The Investment Centre, is client contact.

### Lincoln Capital Management

200 S. Wacker Drive, Chicago, Ill. 60606; (312) 559-2880

| | |
|---|---|
| Total assets managed | $7,442,000,000 |
| Tax-exempt assets managed | $7,388,000,000 |
| Index funds managed | $1,495,000,000 |
| Dedicated funds managed | $924,000,000 |
| Minimum separate account | $50,000,000 |
| Tax-exempt clients | 58 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 10 |

Lincoln Capital Management is an equity, fixed-income and balanced manager.

Its equity approach emphasizes growth stocks. Its fixed-income approach is active with an assured minimum return; interest rate anticipation is employed.

The asset mix Jan. 1 was 31% stocks and 69% bonds; $1.495 billion was in bond index funds.

The firm follows 75 stocks closely and 300, generally; 75% of research is generated internally.

Clients include AT&T, GM, State of Virginia and Ameritech.

J. Parker Hall III, president, is chief investment officer and client contact.

### Lincoln National Pension Insurance Co.

1300 S. Clinton St., Fort Wayne, Ind. 46801; (219) 427-4878

Lincoln National Pension Insurance Co. employs a multimanager approach to provide equity, fixed-income, balanced, international and dedicated bonds/annuities management.

It is responsible for $5.343 billion in assets managed by external managers, of which $5.082 billion is from 2,000 institutional tax-exempt clients. MPT Associates, a wholly owned subsidiary profiled separately, is responsible for an additional $155 million in tax-exempt assets.

It offers five equity funds, using quantitative analysis and growth and emerging growth stocks.

Its fixed-income approach is driven by interest rate anticipation. Four different maturity components are maintained, and returns are maximized by shifting maturities in only one of the components, emphasizing value sectors and swapping issues to take advantage of spreads.

Options, stock index futures and fixed-income futures are used.

The parent company is Lincoln National Corp.

Robert Crispin, executive vice president, is chief investment officer; Bill L. Sanders, vice president, is client contact.

### Lingo Capital Management

3200 West End Ave. Suite 405, Nashville, Tenn. 37203; (615) 292-9546

| | |
|---|---|
| Total assets managed | $8,000,000 |
| Tax-exempt assets managed | $1,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 3 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |
| Size of research staff | 3 |

Lingo Capital Management is an equity, fixed-income and balanced manager.

Its equity approach is quantitative, using successive, statistical screens of its 2,700-stock data base to select equities that meet the firm's rigorous decision criteria.

Its fixed-income approach uses a statistical model to anticipate interest rate trends. Fixed-income investments are selected only when rates are stable or declining.

Kenneth H. Lingo is chief investment officer and client contact.

### Lipman, Carasso & Young

1880 Century Park East Suite 1511, Los Angeles, Calif. 90067; (213) 282-0300

| | |
|---|---|
| Total assets managed | $190,000,000 |
| Tax-exempt assets managed | $40,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 30 |
| Types of accounts managed | CF |
| No. of portfolio managers | 3 |
| Size of research staff | 1 |

Lipman, Carasso & Young Inc. is an equity, fixed-income and balanced manager.

Its equity approach focuses on growth stocks with low p/es and strong balance sheets.

Its fixed-income approach employs short- to intermediate-term maturity, high-quality issues with gradual changes depending on interest rate trends.

Clients include ERLY Industries, Truesdail Labs and Tucson Surgical.

Pierre Carasso is chief investment officer; Mr. Carasso and Barrie Young are client contacts.

### Liquidity Fund Investment

1900 Powell St. Suite 730, Emeryville, Calif. 94608; (415) 652-1462

| | |
|---|---|
| Total assets managed | $93,000,000 |
| Tax-exempt assets managed | $34,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 160 |
| Types of accounts managed | CE |
| No. of portfolio managers | 1 |
| Size of research staff | 15 |

Liquidity Fund Investment Corp. manages portfolios of real estate securities that are purchased below net asset value. Securities purchased include traded real estate equities and illiquid real estate limited partnerships.

It follows 20 stocks closely and 90, generally; all research is generated internally.

Clients include Centerre Trust and Western Airlines Pilot Association.

Sean Subas, executive vice president, is chief investment officer; Brent Donaldson, president, is client contact.

### Loeb Partners Realty

521 Fifth Ave., New York, N.Y. 10175; (212) 883-0371

| | |
|---|---|
| Total assets managed | $700,000,000 |
| Tax-exempt assets managed | $175,000,000 |
| Real estate assets managed | $175,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | CJ |
| Size of research staff | 2 |

Loeb Partners Realty, an equity real estate manager, invests in existing, income-producing properties structured to the needs and requirements of investors.

The parent is Loeb Holding Corp.

Joseph S. Lesser is chief investment officer; Gary L. Naughton is client contact.

### Lomas Capital Management

2001 Bryan P.O. Box 655644, Dallas, Texas 75265; (214) 746-7490

| | |
|---|---|
| Total assets managed | $561,000,000 |
| Tax-exempt assets managed | $315,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 5 |
| Types of accounts managed | CF |
| No. of portfolio managers | 4 |

Lomas Capital Management Co. is an equity, fixed-income and balanced manager.

Its value-oriented, disciplined and long-term equity approach identifies companies with fundamentals representing underpriced value. Portfolios are constructed and adjusted based on risk, economic and cyclical considerations.

Its fixed-income approach is adjusted and monitored based on quality, maturity, duration, market spreads and interest rate variables. A core approach is used including duration and maturity longer or shorter as rates dictate.

The parent company is Lomas & Nettleton Financial Corp.

Clark P. Manning, president, is the chief investment officer; Larry J. Byars, director of marketing, is the client contact.

### The Lomas & Nettleton Advisory Group Inc.

2001 Bryan Tower, Suite 3300, Dallas, Texas 75201; (214) 746-8296

| | |
|---|---|
| Total assets managed | $857,000,000 |
| Tax-exempt assets managed | $857,000,000 |
| Real estate assets managed | $224,000,000 |
| Minimum separate account | $15,000,000 |
| Tax-exempt clients | 96 |
| Types of accounts managed | G |
| No. of portfolio managers | 6 |

The Lomas & Nettleton Advisory Group Inc. provides real estate advisory and separate account services to the pension fund industry as it relates to their income property portfolio.

The asset mix Jan. 1 was 26% mortgages and 74% equity-oriented debt.

The parent company is The Lomas & Nettleton Co.

Clients include Teacher Retirement System of Texas and Pension Reserves Investment Management Board.

David A. Ridley, executive vice president, is the chief investment officer and client contact.

### Lombard Odier Holdings U.K. Ltd.

Norfolk House, 13 Southampton Place, London, WC1A 2AJ U.K.; 01-831-2350

| | |
|---|---|
| Total assets managed | $2,810,000,000 |
| Tax-exempt assets managed | $202,000,000 |
| International assets managed | $202,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 4 |
| Types of accounts managed | CF |
| No. of portfolio managers | 11 |
| Size of research staff | 8 |

Lombard Odier Holdings U.K. Ltd. is an equity, fixed-income, balanced and international manager.

Its equity approach emphasizes rotating among regions and then countries. Equities have growth orientation.

Its fixed-income approach assesses all opportunities and past behavior under various economic conditions. Bond allocation follows. Currency allocation is determined separately.

The parent company is Lombard Odier & Cie.

Robert van Maasdijk, managing director, is the chief investment officer; Karin Bonding is client contact.

### Longfellow Investment Management Co.

160 Federal St., Boston, Mass. 02110; (617) 439-3080

| | |
|---|---|
| Total assets managed | $25,000,000 |
| Tax-exempt assets managed | $16,000,000 |
| Real estate assets managed | $5,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 7 |
| Types of accounts managed | CG |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Longfellow Investment Management Co. is an equity and fixed-income manager.

Its equity approach seeks to produce above-market returns at lower volatility and correlation through closed-end funds, stock index futures and publicly announced tender offers and mergers.

Its fixed-income approach seeks to earn consistent real returns by maintaining portfolio durations of two to three years.

John Ciarleglio III and David W. Seeley, principals, are chief investment officers and client contacts.

### Loomis, Sayles & Co. Inc.

1 Financial Center, Boston, Mass. 02111; (617) 482-2450

| | |
|---|---|
| Total assets managed | $22,142,000,000 |
| Tax-exempt assets managed | $17,476,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 575 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 56 |
| Size of research staff | 29 |

Loomis, Sayles & Co. Inc. is an equity, fixed-income and balanced manager.

Its equity and fixed-income approach is decentralized in regional offices resulting in a broad range of investment styles. Options are used.

The asset mix Jan. 1 was 44.5% stocks and 55.5% bonds.

The firm follows 400 stocks closely.

The New England owns two-thirds of Loomis, Sayles.

Clients include H.F. Ahmanson, Boise Cascade, Bristol Myers and Interco.

Robert L. Kemp, president and chief financial officer, is chief investment officer; Dugal Thomas, vice president and director of marketing, is client contact.

### Lord Abbett & Co.

767 Fifth Ave., New York, N.Y. 10153; (212) 848-1800

| | |
|---|---|
| Total assets managed | $8,898,000,000 |
| Tax-exempt assets managed | $3,038,000,000 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 26 |
| Types of accounts managed | CE |
| No. of portfolio managers | 6 |
| Size of research staff | 23 |

Lord Abbett & Co. is an equity, fixed-income and balanced manager.

Its equity approach emphasizes low p/e ratios, dividends and net asset

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value of issues relative to corresponding ratios for the S&P 500.

Its fixed-income approach focuses on non-traditional management with emphasis on lower-rated and convertible issues.

The asset mix Jan. 1 was 90% stocks, 8% bonds and 2% cash.

The firm follows 250 stocks closely and 300 generally; 90% of the research is generated internally.

Clients include Allied-Signal, AT&T, Carolina Power & Light and Monsanto.

J.M. McCarthy, co-managing partner, is the chief investment officer; M.F. White, director of pension marketing, is the client contact.

### Lotsoff Capital Management

20 N. Wacker Dr., Suite 3200, Chicago, Ill. 60606; (312) 368-1442

| | |
|---|---|
| Total assets managed | $355,000,000 |
| Tax-exempt assets managed | $111,000,000 |
| Real estate assets managed | $5,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 8 |
| Types of accounts managed | C |
| No. of portfolio managers | 3 |
| Size of research staff | 3 |

Lotsoff Capital Management is a fixed-income manager with special expertise in futures and options.

Portfolio insurance is provided to two clients on $21 million in tax-exempt assets.

Half the research is generated internally.

Clients include National Automobile Dealers Association, Federal Express, Ingram Industries and Equifax Inc.

Seymour N. Lotsoff, president, is the chief investment officer; Karen Zelden, vice president, is the client contact.

### Lowe, Brockenbrough, Tierney & Tattersall

6630 W. Broad St., Suite 102, Richmond, Va. 23230; (804) 288-0404

| | |
|---|---|
| Total assets managed | $2,205,000,000 |
| Tax-exempt assets managed | $1,806,000,000 |
| Real estate assets managed | $452,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 93 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 10 |
| Size of research staff | 2 |

Lowe, Brockenbrough, Tierney & Tattersall is an equity, fixed-income and balanced management.

Its equity approach uses industry concentration to add value and focuses on stock with above-average growth and below-average risk to maximize returns while preserving capital. Sector rotation is used.

The fixed-income approach emphasizes sector and maturity selection.

The asset mix Jan. 1 was 30% stocks, 35% bonds, 10% cash and 25% mortgage-backed securities.

It follows 200 stocks closely and 1,000 generally; 25% of research is generated internally.

Clients include American Cancer Society, Teamsters Joint Council No. 83, City of Jacksonville and American Business Products.

Thomas Tierney and Fred Tattersall, managing directors, are chief investment officers; Charles C. Field, vice president and director of marketing, is client contact.

### Lynch & Mayer Inc.

650 Fifth Ave., New York, N.Y. 10019; (212) 246-7760

| | |
|---|---|
| Total assets managed | $840,000,000 |
| Tax-exempt assets managed | $409,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 13 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 5 |

Lynch & Mayer Inc. is an equity and convertible bond manager.

Its equity approach stresses growth stocks. Stock selection focuses on companies with a positive fundamental change and with a potential for a 50% stock price appreciation over an 18-month time horizon.

The firm follows 450 stocks closely and 600 generally; 70% of the research is generated internally.

The parent company is Lincoln National Corp.

Clients include Morton Thiokol, J.P. Stevens, Combustion Engineering and University of North Carolina.

Eldon C. Mayer, chairman, is the chief investment officer; Beth Geraghty, vice president-client service and marketing, is the client contact.

## M

### MacKay-Shields Financial

551 Fifth Ave., New York, N.Y. 10176; (212) 210-0400

| | |
|---|---|
| Total assets managed | $5,100,000,000 |
| Tax-exempt assets managed | $4,258,000,000 |
| Real estate assets managed | $200,000,000 |
| Index funds managed | $191,000,000 |
| Tax-exempt clients | 66 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 12 |
| Size of research staff | 4 |

MacKay-Shields Financial Corp. is an equity, fixed-income, balanced and convertibles manager.

Its active equity approach uses growth stocks and sector concentration. It focuses on strong relative earnings and clearly undervalued assets.

Its active fixed-income approach is disciplined and risk-controlled, using sector analysis and moderate duration adjustments. It also offers enhanced index fund management.

The asset mix Jan. 1 was 31% stocks, 64% bonds and 5% mortgage-backed securities; $37 million was in equity index funds and $154 million was in bond index funds.

The parent is New York Life Insurance Co.

Clients include Westinghouse, Xerox, GM and Litton.

Christina Seix is chief investment officer; Livingston G. Douglas is client contact.

### Madison Investment Advisors

6411 Mineral Point Road, Madison, Wis. 53705; (608) 831-8698

| | |
|---|---|
| Total assets managed | $150,000,000 |
| Tax-exempt assets managed | $112,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 45 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 3 |

Madison Investment Advisors is an equity, fixed-income and balanced manager.

Its equity approach uses market timing after which a value approach is used.

Its fixed-income approach uses interest rate anticipation to lengthen or shorten maturities.

The firm follows 300 stocks closely and 2,100 generally; 40% of the research is generated internally.

Frank E. Burgess, president, is the chief investment officer; Michael J. Schlageter is the client contact.

### Magten Asset Management

35 E. 21st St., New York, N.Y. 10010; (212) 529-6600

| | |
|---|---|
| Total assets managed | $410,000,000 |
| Tax-exempt assets managed | $300,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 11 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 4 |

Magten Asset Management Corp. is a fixed-income manager investing in diversified portfolios of high-yield securities of issuers in weak financial condition or experiencing poor operating results.

These investments include companies with substantial capital needs or negative net worth that are cyclically depressed or downgraded by the rating services.

The firm follows 125 stocks closely and 300 generally; 75% of the research is generated internally.

Clients include General Motors, Niagara Mohawk Power and Mid-Jersey Trucking Local 701.

Talton R. Embry, managing director, is the chief investment officer; Barbara Justiz, managing director-new business development and client service, is client contact.

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### Management Asset Corp.
253 Post Road West, P.O. Box 5006, Westport, Conn. 06881; (203) 226-4768

| | |
|---|---|
| Total assets managed | $700,000,000 |
| Tax-exempt assets managed | $612,000,000 |
| 401(k)/457 assets managed | $3,000,000 |
| 401(k)/457 clients | 2 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 23 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 6 |
| Size of research staff | 3 |

Management Asset Corp., an equity manager, uses a bottom-up stock picker approach with emphasis on sound financial condition, low price in relation to historic earnings and broad diversification. Its investment discipline is to be fully invested in stocks when it sees value.

On Jan. 1, the asset mix was 50% stocks and 50% bonds.

It follows 200 to 300 stocks closely and 6,500 generally; all research is generated internally.

Clients include Xerox, 3M, Combustion Engineering and McKesson Corp.

Leonard M. Heine Jr., chairman, is chief investment officer; David A. Seidel, president, is client contact.

### Manning & Napier Advisors
1 East Ave., Rochester, N.Y. 14604; (716) 325-6880

| | |
|---|---|
| Total assets managed | $2,300,000,000 |
| Tax-exempt assets managed | $2,000,000,000 |
| Types of accounts managed | CEFJ |
| Size of research staff | 10 |

Manning & Napier Advisors Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses specific selection criteria for securities and industries. Its fixed-income approach is based in part on interest rate anticipation and also on use of fixed-income yields as a valuation hurdle for equity selection.

All research is generated internally.

William Manning, president, is chief investment officer; William J. Napier, senior vice president, is client contact.

### Manufacturers Hanover Investment Corp.

See entry for MITCHELL HUTCHINS INSTITUTIONAL INVESTORS INC.

### Manufacturers National Bank of Detroit
100 Renaissance Center, 8th Floor, Detroit, Mich. 48243; (313) 222-9794

| | |
|---|---|
| Total assets managed | $9,061,000,000 |
| Tax-exempt assets managed: | |
| Total | $4,021,000,000 |
| Commingled | $2,008,000,000 |
| Separate | $2,013,000,000 |
| 401(k)/457 assets managed | $732,000,000 |
| 401(k)/457 clients | 295 |
| Real estate assets managed | $18,000,000 |
| Indexed assets managed | $2,855,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients: | |
| Commingled | 882 |
| Separate | 109 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 7 |
| Size of research staff | 9 |

Manufacturers National Bank of Detroit is an equity, fixed-income, balanced and real estate manager.

Its equity approach emphasizes consistent growth with reasonable valuation.

Its fixed-income approach emphasizes interest rate anticipation and sector analysis. Stock index futures are used in index funds.

For real estate, it uses REITs and private deals.

The asset mix Jan. 1 was 50% stocks, 40% bonds, 9.5% cash and 0.5% equity real estate.

It provides portfolio insurance.

The parent company is Manufacturers National Corp.

Clinton P. Schloop, senior vice president and investment officer, is the chief investment officer; James M. Dawson, second vice president, is the client contact.

### Marathon Asset Management Co. Inc.
P.O. Box 9117, 1250 Prospect St. Suite 300, La Jolla, Calif. 92038; (619) 456-8033

| | |
|---|---|
| Total assets managed | $87,000,000 |
| Tax-exempt assets managed | $52,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 9 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Marathon Asset Management Co. Inc. is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented and risk averse. Selection focuses on stocks with strong earnings momentum and low p/e. There are strict loss-control disciplines.

Its fixed-income approach is contrarian and risk averse, using high-grade securities to take advantage of disparities in the yield curve.

Thomas J. Feeney, chairman, and David M. Love, president, are chief investment officers; Mr. Love is client contact.

### Marathon Investment Management
220 Boylston St., Chestnut Hill, Mass. 02167; (617) 527-7500

| | |
|---|---|
| Total assets managed | $155,000,000 |
| Tax-exempt assets managed | $115,000,000 |
| International assets managed | $12,000,000 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

Marathon Investment Management is an equity, fixed-income and balanced manager.

Its equity approach is to monitor and analyze NYSE specialist activity as the first of three steps of investment strategy. Analysis includes fundamental research.

Its fixed-income approach is geared toward analyzing interest-sensitive sector of the market via specialist activity.

Mark H. Bourne, director of research, is chief investment officer and client contact.

### Marine Bank
Ninth & State Sts., Erie, Pa. 16553; (814) 871-9200

| | |
|---|---|
| Total assets managed | $900,000,000 |
| Tax-exempt assets managed: | |
| Total | $300,000,000 |
| Commingled | $60,000,000 |
| Separate | $240,000,000 |
| Real estate assets managed | $19,000,000 |
| International assets managed | $2,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 120 |
| Separate | 185 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 5 |

Marine Bank is an equity, fixed-income, balanced and international manager.

Its equity approach is value-oriented emphasizing low p/e stocks. Equity purchase candidates are from the fourth and fifth quintile.

Its fixed-income approach uses sector analysis; movement between various sectors is based on relative yield spreads.

Clients include Pennsylvania Municipal, Erie County and City of Erie.

The parent company is PNC Financial.

Wayne M. Koble, vice president-manager of trust investments, is the chief investment officer; John W. Masterson, vice president-manager of employee benefits and Timothy N. Smyth, vice president-manager of personal trust, are the client contacts.

### Marine Investment Management Co.
3 S. Old State Capitol Plaza, Springfield, Ill. 62701; (217) 753-0300

| | |
|---|---|
| Total assets managed | $860,000,000 |
| Tax-exempt assets managed | $802,000,000 |
| Real estate assets managed | $150,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 23 |
| Types of accounts managed | CFG |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

Marine Investment Management Co. is an equity, fixed-income and balanced manager.

Its equity approach is contrarian, emphasizing Graham & Dodd analysis. It actively seeks undervalued companies with sound financial structure and underlying asset value, sound management, manageable debt, and a growing stream of dividends.

Its fixed-income approach relies on interest rate anticipation, analyzing the economic environment to position portfolios for maturity.

The asset mix Jan. 1 was 4% stocks, 58% bonds, 13% cash and 25% mortgage-backed securities.

The parent company is Marine Corp.

George R. Humm, executive vice president, is chief investment officer and client contact.

### Marinvest
250 Park Ave., New York, N.Y. 10177; (212) 503-6815

| | |
|---|---|
| Total assets managed | $2,575,000,000 |
| Tax-exempt assets managed | $888,000,000 |
| 401(k)/457 assets managed | $139,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 14 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 7 |
| Size of research staff | 6 |

Marinvest is an equity, fixed-income, balanced and nuclear decommissioning trust manager.

Its equity approach features total return, capital enhancement and high-yield portfolios. It uses value-based criteria to screen stocks. Subsequent in-house analysis seeks to identify revaluation potential.

Its fixed-income approach seeks to exceed market performance with price volatility reflective of the market; yield is enhanced through active sector rotation. Maturities are adjusted to reflect interest rate movements.

International investing is offered by Wardley Investment Services Ltd.

The asset mix Jan. 1 was 34% stocks, 30% bonds and 36% cash.

The parent is Marine Midland Holdings Inc.

Leo Grohowski and Bonnie O'Neil set the investment policy for equities; Wayne Wong and Ed Merkle set investment policy for fixed income. Denman Zirkle, business manager, is client contact.

### Markston Investment Management
633 Third Ave. 17th Floor, New York, N.Y. 10017; (212) 972-3120

| | |
|---|---|
| Total assets managed | $343,000,000 |
| Tax-exempt assets managed | $198,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | C |
| No. of portfolio managers | 3 |
| Size of research staff | 3 |

Markston Investment Management, an equity manager, uses Graham & Dodd analysis with growth and low p/e stocks, investing in businesses whose profitable goods and services generate the cash necessary for research, development and capital needs.

Its fixed-income approach is passive.

The parent company is Mutual Benefit Life Insurance Co.

John R. Stone, president, is chief investment officer and client contact.

### Marsh & Cunningham Inc.
1 Liberty Square, P.O. Box 1961, Boston, Mass. 02105; (617) 482-0290

| | |
|---|---|
| Total assets managed | $145,000,000 |
| Tax-exempt assets managed | $21,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 9 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 2 |

Marsh & Cunningham Inc. is an equity, balanced and international manager.

Its equity approach is value-oriented using Graham & Dodd analysis to determine low p/e stocks. It seeks stocks undervalued according to earnings growth potential and/or underlying asset value.

Its fixed-income approach analyzes interest rates against their historical returns and current projections. Issuer-credit risk is evaluated.

Clients include Maidenform, Tobey Health Systems and Lexington Christian Academy.

John B. Marsh, principal, is chief investment officer and client contact.

### Marsh & Cunningham — Castegren International
1 Liberty Square, P.O. Box 1961, Boston, Mass. 02105; (617) 482-0290

| | |
|---|---|
| Total assets managed | $90,000,000 |
| Tax-exempt assets managed | $62,000,000 |
| International assets managed | $62,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |

Marsh & Cunningham — Castegren International is an international manager.

Its equity approach uses top-down country allocation and bottom-up stock selection. Low p/e stocks are identified using a 950-stock data base.

The parent company is Marsh & Cunningham Inc.

Clients are General Electric and Owens Illinois.

Hakan Castegren, principal, is the chief investment officer and the client contact.

### Marshall & Sullivan Inc.
1001 4th Avenue Plaza, Suite 4131, Seattle, Wash. 98154; (206) 621-9014

| | |
|---|---|
| Total assets managed | $1174,000,000 |
| Tax-exempt assets managed | $79,000,000 |
| Tax-exempt clients | 97 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 2 |

Marshall & Sullivan Inc. is an equity and balanced manager.

Its equity approach is to seek quality companies with superior and consistent earnings-per-share growth and p/e ratios. It seeks superior balance sheet ratios and profitability measures.

Its fixed-income approach is to invest in U.S. government securities with maturities of one to six years. It uses fixed income for certainty of cash flow, safety of principal and volatility reduction.

Ron Marshall and Doyle Sullivan are the chief investment officers; Ralph Purvis and William Frey are the client contacts.

### J.D. Martin & Co.
1300 Free Press Building, Detroit, Mich. 48226; (313) 961-1117

| | |
|---|---|
| Total assets managed | $106,000,000 |
| Tax-exempt assets managed | $62,000,000 |
| Tax-exempt clients | 37 |
| Types of accounts managed | CJ |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

J.D. Martin & Co. is an equity, fixed-income and balanced manager.

Its equity approach emphasizes consistent and predictable growth of earnings and dividends, equally weighted, using proprietary valuation methodology. Analysis of asset valuation looking for low p/e stocks is secondary.

Its fixed-income approach uses sector analysis with emphasis in the corporate sector and interest rate anticipation. Weight is placed on stability or low volatility of principal.

James D. Martin, president, is the chief investment officer; George M. Richmond is the client contact.

### Martingale Asset Management
12 Marshall St., Boston, Mass. 02108; (617) 720-1334

| | |
|---|---|
| Total assets managed | $5,000,000 |
| Tax-exempt assets managed | $5,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 1 |
| Types of accounts managed | C |
| No. of portfolio managers | 3 |
| Size of research staff | 4 |

Martingale Asset Management, an equity manager, uses a proprietary valuation model that responds to chang-


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ing market preferences. Options are used.

The firm follows 1,800 stocks closely and 1,800, generally.

William Jacques, partner, is chief investment officer; Arnold Wood, partner, is client contact.

### Maryland Capital Management Inc.

12 E. Eager St., Baltimore, Md. 21202; (301) 547-2666

| | |
|---|---|
| Total assets managed | $15,000,000 |
| Tax-exempt assets managed | $4,000,000 |
| Real estate assets managed | $2,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 4 |
| Types of accounts managed | CF |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Maryland Capital Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach blends growth stock and a value orientation emphasizing low p/e stocks to create a covariant investment strategy.

Its fixed-income approach is passive, controlling the maturity risk while reducing the annual volatility of the total account.

L. J. Hartwig, chairman, is the chief investment officer and is the client contact.

### Mason Hill Asset Management

477 Madison Ave., 24th Floor, New York, N.Y. 10022; (212) 421-3100

| | |
|---|---|
| Total assets managed | $20,000,000 |
| Tax-exempt assets managed | $8,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | CF |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

Mason Hill Asset Management is an equity, fixed-income and balanced manager.

Its equity approach uses Graham & Dodd analysis; it seeks low p/e stocks. Its fixed-income approach is passive.

The firm follows 50 stocks closely and 200 generally; all research is generated internally.

William W. Strong is the chief investment officer and client contact.

### Massachusetts Financial Services Co.

200 Berkeley St., Boston, Mass. 02116; (617) 423-3500

| | |
|---|---|
| Total assets managed | $19,475,000,000 |
| Tax-exempt assets managed | $2,485,000,000 |
| Real estate assets managed | $312,000,000 |
| International assets managed | $49,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 20 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 29 |
| Size of research staff | 23 |

Massachusetts Financial Services Co. is an equity, fixed-income, balanced and international manager.

Its equity approach capitalizes on return differentials between industry groups, rotating sectors and industries where relative price momentum and prospective earnings potential look best. Its fixed-income strategy is based on yield curve and interest rate analysis. Options and fixed-income futures are used.

The asset mix Jan. 1 was 28% stocks, 43% bonds, 18% cash and 11% mortgage-backed securities; $49 million was in foreign bonds.

The firm follows 500 stocks closely and 1,000, generally; 85% of research is generated internally.

The parent is Sun Life Assurance Co. of Canada U.S.

Clients include Alcoa, Los Angeles County Employees, NYNEX and Louisiana Teachers.

A. Keith Brodkin, president, is chief investment officer; William H. Lynch and James H. Kelly Jr., vice presidents, are client contacts.

### Massachusetts Mutual Life Insurance Co.

295 State St., Springfield, Mass. 01111; (413) 788-8411

| | |
|---|---|
| Total assets managed | $19,900,000,000 |
| Tax-exempt assets managed: | |
| Total | $9,300,000,000 |
| Pooled accounts | $1,000,000,000 |
| Separate accounts | $250,000,000 |
| GICs | $2,600,000,000 |
| Annuities | $1,400,000,000 |
| Other | $3,952,000,000 |
| 401(k)/457 assets managed | $616,000,000 |
| 401(k)/457 clients | 612 |
| Real estate assets managed | $62,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 709 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 4 |
| Size of research staff | 24 |

Massachusetts Mutual Life Insurance Co. is an equity, fixed-income, balanced, real estate and GIC manager.

Its equity approach emphasizes low p/e stocks and yield, identifying financially strong companies with a history of dividend growth purchased at discounted valuation levels. Its fixed-income approach is based on sector anaiysis. Stock index futures and fixed-income futures are used.

The real estate approach emphasizes well-diversified portfolios with a balance between cash and price appreciation.

The separate account asset mix Jan. 1 was 73% stocks, 10% bonds, 12% cash and 5% equity real estate.

The insurer follows 100 stocks closely and 150, generally; 50% of research is generated internally.

It provides portfolio insurance to 15 clients covering $20 million in assets.

Richard G. Dooley is the chief investment officer.

### Mathers & Co Inc.

100 Corporate North, Suite 201, Bannockburn, Ill. 60015; (312) 295-7400

| | |
|---|---|
| Total assets managed | $873,000,000 |
| Tax-exempt assets managed | $471,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 12 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 4 |

Mathers & Co. Inc. is an equity and balanced manager.

Its equity approach emphasizes bottom-up issue selection based on underlying fundamental value and the existence of special-situation characteristics.

Its fixed-income approach is oriented toward analysis of interest rates, equities and the overall economic outlook.

The firm uses options and stock index futures in a limited capacity.

The firm follows 100 stocks closely and 400 generally; 20% of the research is generated internally.

Clients include Amsted Industries, Peoples Energy, Christian Brothers Retirement and Indiana University.

Henry G. Van der Eb Jr. is the chief investment officer; Daniel P. Abercrombie is the client contact.

### Matrix Capital Management

1 Greenwich Plaza, Greenwich, Conn. 06830; (203) 629-4400

| | |
|---|---|
| Total assets managed | $697,000,000 |
| Tax-exempt assets managed | $697,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 15 |
| Types of accounts managed | CG |
| No. of portfolio managers | 4 |

Matrix Capital Management Inc., an equity and balanced manager, uses a quantitative investment approach that emphasizes sector rotation.

The asset mix Jan. 1 was 95.5% stocks, 2.5% bonds and 2% cash.

The firm follows 1,000 stocks closely and 2,000, generally; 99% of the research is generated internally.

The parent company is The Prudential Life Insurance Co. of America.

Michael A. Petrino, president and senior managing partner, is chief investment officer; Lynn Edelman, vice president, is client contact.

### Mawer & Associates Investment Counsel

603 Seventh Ave. S.W. Suite 600, Calgary, Alberta T2V 2N2; (403) 262-4673

| | |
|---|---|
| Total assets managed | $178,000,000 |
| Tax-exempt assets managed: | |
| Total | $52,000,000 |
| For subsidiaries of U.S. firms | $14,000,000 |
| Non-North American assets | $3,000,000 |
| Tax-exempt clients | 16 |
| U.S. subsidiaries | 3 |
| Type of accounts managed | CEF |
| No. of portfolio managers | 5 |
| Size of research staff | 1 |

Mawer & Associates Investment Counsel, a Canadian firm, is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented, using low p/es and Graham & Dodd analysis. Its fixed-income approach is based on interest rate anticipation, focusing on safety of principal and real income. Term adjustments between five and 15 years are made in view of the real return available.

Leighton F. Pullen is chief investment officer; Gerald A. Cooper-Key and Donald T. Ferris are client contacts.

### McBryan, Malone & Russell

Park Road Plaza, Box 144A, R.D. 11, Reading, Pa. 19607; (215) 777-8110

| | |
|---|---|
| Total assets managed | $80,000,000 |
| Tax-exempt assets managed | $70,000,000 |
| Minimum separate account | $350,000 |
| Tax-exempt clients | 103 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 4 |

McBryan, Malone & Russell is an equity and options manager.

Its equity approach focuses on option writing and hedging. Stocks are selected that are not likely to decline in value, have good financial characteristics and are selling at a fair value. Once a stock is bought, the firm sells call options. Its fixed-income approach is passive.

The firm follows 40 stocks closely and 75 generally; all research is generated internally.

Donald J. McBryan is the chief investment officer; M. Kevin Malone is the client contact.

### McCowan Associates Inc.

70 Pine St., New York, N.Y. 10270; (212) 480-8711

| | |
|---|---|
| Total assets managed | $1,445,000,000 |
| Tax-exempt assets managed | $1,244,000,000 |
| Real estate assets managed | $25,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 32 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 4 |
| Size of research staff | 3 |

McCowan Associates Inc. is an equity, fixed-income and balanced manager.

Its equity approach emphasizes growth and emerging growth stocks.

Its fixed-income approach emphasizes interest rate anticipation and sector analysis. Interest rate forecasting determines maturity term structure, while security selection emphasizes high-quality marketability.

The asset mix Jan. 1 was 82% stocks, 7% bonds, 9% cash and 2% mortgage-backed securities.

The firm follows 75 stocks closely and 150 generally; 60% of the research is generated internally.

Clients include Kress Foundation, Michigan State University, NYNEX and Texaco.

Bruce J. McCowan, principal and chairman, is the chief investment officer; Paul F. Pfeiffer, principal, is the client contact.

### McCullough, Andrews & Cappiello Inc.

101 California St., No. 4250, San Francisco, Calif. 94111; (415) 956-8700

| | |
|---|---|
| Total assets managed | $775,000,000 |
| Tax-exempt assets managed | $560,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 71 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 4 |
| Size of research staff | 2 |

McCullough, Andrews & Cappiello Inc. is an equity and balanced manager.

Its equity approach is based on maintenance of buying power through growth of earnings and dividends on relatively low p/e values purchased on a timely basis at the lower end of their relative trading ranges.

Its fixed-income strategy uses interest rate anticipation with an emphasis on liquidity and quality. Identification of major trends is paramount.

The asset mix Jan. 1 was 77% stocks, 12% bonds and 11% cash.

Clients include Santa Clara University Endowment, Pacific Stock Exchange and City & County of San Francisco Retirement Plan.

Robert F. McCullough, chairman, is the chief investment officer and the client contact.

### McGlinn Capital Management Inc.

850 N. Wyomissing Blvd., P.O. Box 6158, Wyomissing, Pa. 19610-0158; (215) 374-5125

| | |
|---|---|
| Total assets managed | $2,000,000,000 |
| Tax-exempt assets managed | $1,700,000,000 |
| 401(k)/457 assets managed | $25,000,000 |
| 401(k)/457 clients | 6 |
| Dedicated funds managed | $550,000,000 |

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| | |
|---|---|
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 70 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 7 |
| Size of research staff | 7 |

McGlinn Capital Management Inc. is an equity, fixed-income and balanced manager.

Its top-down equity approach combines Graham & Dodd analysis, low p/e stocks, sector rotation, market timing and quantitative analysis.

Its fixed-income approach focuses on interest rate direction and the posture of the Federal Reserve Board. Portfolios are concentrated in intermediate-term government and high-quality corporate issues.

Options, stock index futures and bond index futures are used in limited private investment partnerships.

The asset mix Jan. 1 was 30% stocks, 55% bonds and 15% cash.

The firm follows 100 stocks closely and 400 generally; 40% of the research is generated internally.

Clients include Carpenter Technology, Pennsylvania State Employes and Central Pennsylvania Teamsters.

Terrence J. McGlinn, president, is the chief investment officer; James A. Walker, senior vice president, is the client contact.

## C.S. McKee & Co. Inc.

1 Gateway Center, Pittsburgh, Pa. 15222; (412) 566-1234

| | |
|---|---|
| Total assets managed | $1,100,000,000 |
| Tax-exempt assets managed | $1,100,000,000 |
| Dedicated funds managed | $13,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 93 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 8 |

C.S. McKee & Co. Inc. is an equity, fixed-income and balanced manager.

Its equity approach is risk-averse and opportunistic, emphasizing a bottom-up style. For risk avoidance, it utilizes broad diversification and periodic reduction of exposure by raising cash. In its opportunistic approach, it stresses value-oriented selection, including low p/e, increased earnings and high return on earnings.

Its fixed-income approach is risk-averse and opportunistic. Identifying interest rate direction is essential to protect and enhance capital. Sector and quality shifts enhance return potential; investments are A or better.

The asset mix Jan. 1 was 45% stocks, 49% bonds and 6% cash.

It follows 150 stocks closely and 1,000 generally; all research is generated internally.

The parent company is United Asset Management.

Clients include Allegheny County, First Catholic Slovak Union of United States and Canada, Electric Materials and Buhl Foundation.

Charles E. Jacobs is chief investment officer; James H. Hanes, president, is client contact.

## McLean, Budden Ltd.

390 Bay St. Suite 1000, Toronto, Ontario M5H 2Y2; (416) 862-9800

| | |
|---|---|
| Total assets managed | $1,464,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,216,000,000 |
| For subsidiaries of U.S. firms | $174,000,000 |
| Non-North American assets | $156,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 12 |
| U.S. subsidiaries | 1 |
| Types of accounts managed | CEFU |
| No. of portfolio managers | 9 |

McLean, Budden Ltd., a Canadian firm, is an equity, fixed-income and balanced manager.

Its equity approach stresses long-term fundamentals with capital appreciation receiving primary emphasis. The philosophy is fundamental, emphasizing high-quality growth stocks with strong balance sheets and smaller, well-managed Canadian companies.

Its fixed-income approach places emphasis on interest rate expectations and changes in sector spreads.

Term decisions are based on duration; active trading is done to increase return based on market inefficiencies.

The asset mix Jan. 1 was 30% Canadian stocks, 10% U.S. stocks, 45% bonds and 15% cash.

It follows 125 Canadian and 90 foreign stocks closely and 300 to 400, generally; 80% of research is generated internally.

R.S.C. Donald, chairman, is chief investment officer; Wendy J. Pope, vice president, is client contact.

## McMahan Real Estate Advisors Inc.

201 California St., Suite 400, San Francisco, Calif. 94111; (415) 433-7770

| | |
|---|---|
| Total assets managed | $553,000,000 |
| Tax-exempt assets managed | $410,000,000 |
| Real estate assets managed | $410,000,000 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | CG |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

McMahan Real Estate Advisors Inc. acquires high-quality, operating retail, office and industrial properties in growth corridors of major metropolitan areas in the West. The firm adds value through "hands-on" property management. Dispositions are reviewed annually and sale is strategically timed to coincide with favorable market conditions.

The parent company is McMahan Financial Services Inc.

Clients include Southwestern Bell, Contra Costa County Employees and SEI.

John McMahan, president, is chief investment officer; Frank C. Harding Jr. and Jean C. Hurley, vice presidents, are the client contacts.

## McMillion/Eubanks Capital Management Inc.

P.O. Box 21447, Greensboro, N.C. 27420; (919) 274-4876

| | |
|---|---|
| Total assets managed | $155,000,000 |
| Tax-exempt assets managed | $66,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 36 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 5 |
| Size of research staff | 2 |

McMillion/Eubanks Capital Management Inc. is a top-down, equity and balanced manager that uses economic, fundamental and technical resources to identify emerging secular trends. Monetary, fiscal and trade policies are analyzed to pinpoint developing themes and sectors. Proprietary earnings momentum and valuation screens aid in identifying undervalued issues.

The parent company is McMillion/Eubanks Inc.

Robert C. Eubanks Jr., president, is the chief investment officer; William B. Carr, executive vice president, is the client contact.

## McMorgan & Co.

201 Spear St., Suite 1700, San Francisco, Calif. 94105; (415) 777-9300

| | |
|---|---|
| Total assets managed | $4,800,000,000 |
| Tax-exempt assets managed | $4,800,000,000 |
| Real estate assets managed | $1,300,000,000 |
| Tax-exempt clients | 45 |
| Types of accounts managed | JG |
| No. of portfolio managers | 9 |

McMorgan & Co. is an equity, fixed-income, balanced and real estate manager.

The asset mix Jan. 1 was 40% stocks, 30% bonds, 5% cash, 10% equity real estate and 15% mortgages.

Thomas Morton is chief investment officer; William Summer is client contact.

## John McStay Investment Counsel

5949 Sherry Lane, Suite 1560, Dallas, Texas 75225; (214) 750-4932

| | |
|---|---|
| Total assets managed | $400,000,000 |
| Tax-exempt assets managed | $400,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 15 |
| Types of accounts managed | CF |
| No. of portfolio managers | 4 |

John McStay Investment Counsel is an equity, fixed-income and balanced manager.

Its equity approach is rotational and theme oriented. Fundamental research focuses on companies with relative price and earnings momentum, resulting in portfolios with growth characteristics.

Its fixed-income approach is risk averse and oriented toward cash flow and volatility requirements. Convertible debentures are utilized.

The firm follows 50 stocks closely and 250 generally; 35% of the research is generated internally.

Clients include Board of Pensions of the United Methodist Church, Pacific Telesis Group, Georgia-Pacific and North Dakota Public Employees.

John McStay, managing partner, is the chief investment officer; Tricia Hundley, principal, is the client contact.

## Mellon Bond Associates

1 Mellon Bank Center, Pittsburgh, Pa. 15258; (412) 234-3602

| | |
|---|---|
| Total assets managed | $16,875,000,000 |
| Tax-exempt assets managed: | |
| Total | $16,665,000,000 |
| Commingled | $5,856,000,000 |
| Separate | $10,809,000,000 |
| Indexed assets managed | $5,825,000,000 |
| Dedicated assets managed | $1,664,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients: | |
| Commingled | na |
| Separate | 121 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 14 |
| Size of research staff | 4 |

Mellon Bond Associates, a fixed-income manager, establishes a performance benchmark for each actively managed account, followed by strict control of duration, yield, income and cash flow structure. Value is added by sector/quality spread valuation and issue selection. Fixed-income futures are used.

All assets were in bonds as of Jan. 1.

Clients include Pennsylvania School Employes, NYNEX, New York City Teachers and Alcoa.

The parent company is Mellon Bank Corp.

Paul R. McCann is the chief investment officer; William Adam is client contact.

## Mellon Capital Management

595 Market St., Suite 2900, San Francisco, Calif. 94105; (415) 546-6056

| | |
|---|---|
| Total assets managed | $19,200,000,000 |
| Tax-exempt assets managed | $19,180,000,000 |
| 401(k)/457 assets managed | $53,000,000 |
| 401(k)/457 clients | 5 |
| International assets managed | $147,000,000 |
| Index funds managed | $16,000,000,000 |
| Tax-exempt clients | 119 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 6 |
| Size of research staff | 5 |

Mellon Capital Management is an equity, fixed-income, balanced and international manager.

Its equity approach is passive and quantitative. Its fixed-income approach is passive. Options, stock index futures and fixed-income futures are used. All of the above can be used to implement tactical asset allocation.

The asset mix Jan. 1 was 80% stocks and 20% bonds. As of the same date, the firm had $13 billion in equity index funds and $2.9 billion in bond index funds.

About 75% of the research is generated internally.

The parent company is Mellon Bank Corp.

William L. Fouse is the chief investment officer; Mr. Fouse and Thomas F. Loeb, president, are the client contacts.

## Mellon Equity Associates

500 Grant St., Suite 4100, Pittsburgh, Pa. 15258-0001; (412) 234-1394

| | |
|---|---|
| Total assets managed | $2,544,000,000 |
| Tax-exempt assets managed | $2,544,000,000 |
| 401(k)/457 assets managed | $37,000,000 |
| 401(k)/457 clients | 8 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 53 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 3 |
| Size of research staff | 5 |

Mellon Equity Associates is an equity and balanced manager.

Its equity approach is quantitative, with disciplined security valuation and portfolio construction processes designed to maximize expected return per unit of risk taken. Stock index futures and fixed-income futures are used.

Portfolio insurance covers $48 million in assets for four clients.

The fixed-income portion of balanced accounts is managed by Mellon Bond Associates.

The asset mix Jan. 1 was 82% stocks, 16% bonds and 2% cash.

The firm follows 1,500 stocks closely and 2,000 generally; 80% of the research is generated internally.

The parent company is Mellon Bank Corp.

Clients include AT&T, Lockheed, Pennsylvania Public School Employes and Chevron.

Richard M. Siefert, president, is the chief investment officer; Francis "Tim" Stack, senior vice president, is the client contact.

## Mellon-Pictet International Management Ltd.

Cutlers Gardens, 5 Devonshire Square, London EC2M 42D, U.K.; 01-283-7471

| | |
|---|---|
| Total assets managed | $1,122,000,000 |
| Tax-exempt assets managed | $630,000,000 |
| International assets managed | $630,000,000 |
| Tax-exempt clients | 21 |
| Types of accounts managed | CF |
| No. of portfolio managers | 6 |
| Size of research staff | 22 |

Mellon-Pictet International Management Ltd. is an equity, fixed-income, balanced, international and global manager.

Its international equity approach is fundamentally driven, top-down and active. It places major emphasis on concentration of markets and stocks.

Its international fixed-income approach emphasizes "getting the big picture right." The key is broad diversification and high quality.

The asset mix Jan. 1 was 80% stocks, 18% bonds and 2% cash. As of the same date, the firm had $504 million in foreign stocks, $113 million in foreign bonds and $13 million in foreign cash.

It follows 500 stocks closely and 1,000 generally; 60% of the research is generated internally.

The parent company is Mellon Bank, N.A., and Pictet & Cie, Geneva.

Clients include Coca Cola, General Motors, Honeywell and Kraft.

Dan Blanks, president, is the chief investment officer; Steven Albrecht, director-client relations, is the client contact in Boston at (617) 238-1529.

## Mellon Real Estate Investment Management

551 Madison Ave., New York, N.Y. 10022; (212) 702-4040

| | |
|---|---|
| Total assets managed | $1,220,000,000 |
| Tax-exempt assets managed | $1,110,000,000 |
| Real estate assets managed | $766,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 11 |
| Types of accounts managed | CG |
| No. of portfolio managers | 8 |
| Size of research staff | 48 |

Mellon Real Estate Investment Management Corp., a real estate manager, designs portfolios to meet specific investment objectives, investing in both equity (direct ownership) and debt (mortgages).

The asset mix Jan. 1 was 44% equity real estate, 25% mortgages and 31% hybrid debt.

The parent company is Mellon Bank Corp.

Clients include Westinghouse, Bell Atlantic, Borg Warner and Detroit General Retirement System.

James T. Foran, executive vice president, is chief investment officer; Karin E. Shewer, senior vice president, is client contact.

## L.J. Melody & Co.

5847 San Felipe, Suite 4400, Houston, Texas 77057; (713) 787-1900

| | |
|---|---|
| Total assets managed | $2,105,000,000 |
| Tax-exempt assets managed | $780,000,000 |
| Real estate assets managed | $780,000,000 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 3 |
| Types of accounts managed | CG |

L.J. Melody & Co., a real estate manager, acquires and manages hybrid debt and equity real estate investments nationwide through separate account and specialized commingled fund strategies.

The asset mix Jan. 1 was 54% equity real estate and 46% mortgages.

Clients include Phoenix Mutual Life, Teacher Retirement System of Texas,

CIGNA and Provident Life and Accident Insurance.

Lawrence J. Melody is chief investment officer; Robert D. Barkley, vice president, is client contact.

### Mercantile National Bank of Indiana

5243 Hohman Ave., Hammond, Ind. 46325; (219) 932-8220

| | |
|---|---|
| Total assets managed | $121,000,000 |
| Tax-exempt assets managed: | |
| Total | $49,000,000 |
| Commingled | $11,000,000 |
| Separate | $38,000,000 |
| Minimum separate account | $500,000 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

Mercantile National Bank of Indiana is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented; fundamental analysis aids in identifying undervalued securities. Its fixed-income approach uses sector analysis.

The parent company is Mercantile Bancorp Inc.

Edward A. Studzinski, trust investment officer, is the chief investment officer; Gregory A. Marx, vice president and trust officer, is the client contact.

### Mercantile-Safe Deposit & Trust Co.

2 Hopkins Plaza, Baltimore, Md. 21201; (301) 237-5548

| | |
|---|---|
| Total assets managed | $5,704,000,000 |
| Tax-exempt assets managed: | |
| Total | $3,100,000,000 |
| Commingled | $734,000,000 |
| Separate | $2,366,000,000 |
| Real estate assets managed | $124,000,000 |
| Minimum separate account | $1,000,000 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 8 |
| Size of research staff | 8 |

Mercantile-Safe Deposit & Trust Co. is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented and focuses on high-yield, low p/e securities. Emphasis is placed on the buy/sell discipline.

Its fixed-income approach is risk-averse, using bonds to counterbalance market volatility.

The asset mix Jan. 1 was 35% stocks, 46% bonds, 15% cash and 4% mortgage-backed securities.

It follows 200 stocks closely and 3,000, generally; 60% of research is generated internally.

The parent company is Mercantile Bankshares.

James D. Hardesty, executive vice president, is chief investment officer; John N. Wetzelberger is client contact.

### Mercator Asset Management

2400 E. Commercial Blvd., Fort Lauderdale, Fla. 33308; (305) 771-9660

| | |
|---|---|
| Total assets managed | $500,000,000 |
| Tax-exempt assets managed | $400,000,000 |
| Minimum separate account | $10,000,000 |
| Types of accounts managed | CE |
| No. of portfolio managers | 3 |

Mercator Asset Management, an equity manager, takes a value approach focusing on low p/e stocks.

The parent company is Prudential Insurance Co. of America.

Michael Williams is client contact.

### The Merchants Bank

1125 Grand Ave., Kansas City, Mo. 64106; (816) 556-6062

| | |
|---|---|
| Total assets managed | $387,000,000 |
| Tax-exempt assets managed: | |
| Total | $116,000,000 |
| Separate | $116,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients: | |
| Separate | 213 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

The Merchants Bank is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented, emphasizing low p/e stocks. Its fixed-income approach emphasizes interest rate anticipation.

The bank follows 50 stocks closely and 1,700 generally; 25% of research is generated internally.

W. Patrick Sterner, executive vice president, is the chief investment officer and the client contact.

### Merchants Investment Counseling Inc.

1 Merchants Plaza, Suite 838E, Indianapolis, Ind. 46255; (317) 267-3731

| | |
|---|---|
| Total assets managed | $332,000,000 |
| Tax-exempt assets managed | $321,000,000 |
| Real estate assets managed | $32,000,000 |
| International assets managed | $14,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 41 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

Merchants Investment Counseling Inc. is an equity, fixed-income and balanced manager.

Its equity approach identifies companies with strong earnings consistency and momentum and that conform with macro-analytical decisions.

Its fixed-income approach is to construct portfolios with an overall risk profile tilted relative to identified market risk, to achieve maximum reward.

Options are used.

The parent company is Merchants National Corp.

Jeffrey L. Weber is the chief investment officer; Susan S. Thomas is the client contact.

### Merchants National Bank

1 Merchants Plaza, Indianapolis, Ind. 46255; (317) 267-3731

| | |
|---|---|
| Total assets managed | $4,494,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,160,000,000 |
| Commingled | $42,000,000 |
| Separate | $1,118,000,000 |
| 401(k)/457 assets managed | $45,000,000 |
| 401(k)/457 clients | 10 |
| Tax-exempt clients: | |
| Commingled | 220 |
| Separate | 115 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 6 |
| Size of research staff | 3 |

Merchants National Bank is an equity, fixed-income and balanced manager.

Its equity approach uses mainly growth stocks with income stocks added according to market conditions.

Its fixed-income approach is based on interest rate anticipation and uses active duration management while employing high-quality bonds.

The asset mix Jan. 1 was 55% stocks, 35% bonds and 10% cash.

The parent company is Merchants National Corp.

Clients include Eli Lilly & Co., Indiana Public Employees and Indianapolis Power & Light.

Michael Burgad, vice president and senior investment officer, is chief investment officer; Susan S. Thomas is client contact.

### Merganser Capital Management Corp.

1 Cambridge Center, Cambridge, Mass. 02142; (617) 494-1000

| | |
|---|---|
| Total assets managed | $1,338,000,000 |
| Tax-exempt assets managed | $1,329,000,000 |
| Real estate assets managed | $394,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 5 |
| Types of accounts managed | CFG |
| No. of portfolio managers | 2 |

Merganser Capital Management Corp., a fixed-income manager, emphasizes capital preservation. Value is added by investing in sectors and securities that offer attractive returns compared to U.S. government securities on a yield-to-maturity basis.

The Jan. 1 asset mix was 42% bonds, 2% cash, 22% mortgage-backed securities, 33% money markets and 1% GICs.

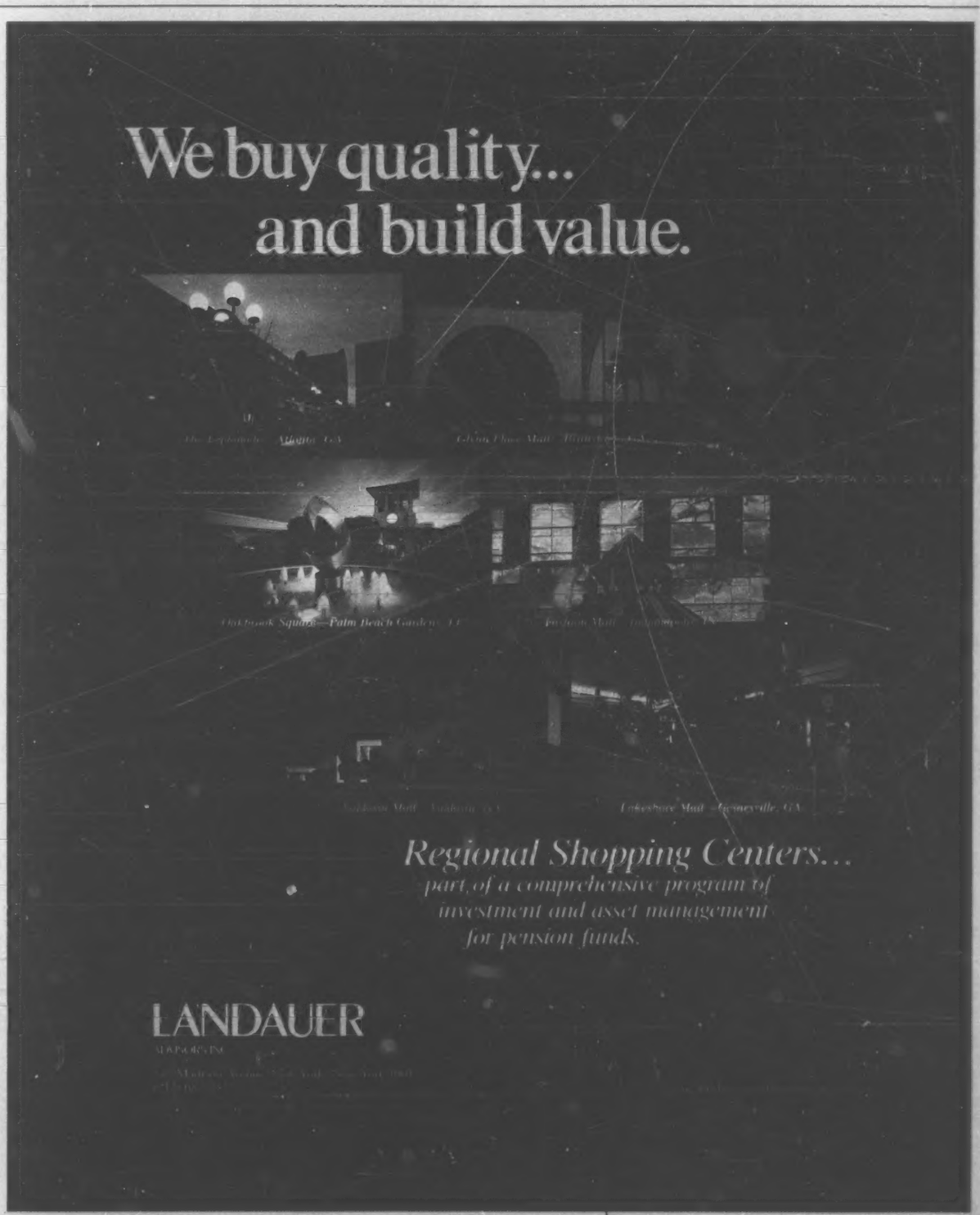
Clients include Polaroid, National Academy of Sciences and Virginia Supplemental.

Edward M. Safran, president, is chief investment officer; James S. Wakefield, vice president, is client contact.

### Meridian Capital Management Ltd.

450 B St. Suite 780, San Diego, Calif. 92101; (619) 239-9049

| | |
|---|---|
| Total assets managed | $$5,000,000 |



| | |
|---|---|
| Tax-exempt assets managed | $14,000,000 |
| International assets managed | $7,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 30 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 2 |

Meridian Capital Management Ltd. an equity, balanced and international manager.

Its equity approach uses active asset allocation with a special situation bias that also incorporates fixed income and cash equivalents. It concentrates on value-oriented growth companies with superior appreciation potential. Its fixed-income approach is passive, using primarily short- to medium-duration Treasuries. Options are used.

Ellis Smith and John Messner are chief investment officers; Kimberlee O'Maley is client contact.

### Meridian Investment Co.

P.O. Box 2000, Valley Forge, Pa. 19482; (215) 251-7986

| | |
|---|---|
| Total assets managed | $725,000,000 |
| Tax-exempt assets managed | $458,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 32 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 6 |
| Size of research staff | 5 |

Meridian Investment Co. is an equity, fixed-income, balanced and convertibles manager.

Its equity approach is quantitative, combining growth stock and convertible securities. It uses Quantitative Evaluation and Selection Techniques, which evaluate four variables for ranking 1,000 stocks and constructs portfolios from those rated highest.

Its fixed-income uses sector analysis, with a quantitative process that focuses on components of credit supply and demand and inflation trends. A computer model monitors 11 variables for maturity and sector allocations.

The parent company is Meridian Asset Management.

Clients include Hess's, Tasty Baking, Sheet Metal Workers Local 19 and Dickinson College.

Phillip H. Brown II is chief investment officer; Dawson Richardson and Lawrence Neill, vice presidents, are client contacts.

### Meridian Management Co.

1000 Plaza West Building, Little Rock, Ark. 72205; (501) 663-7055

| | |
|---|---|
| Total assets managed | $283,000,000 |
| Tax-exempt assets managed | $242,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 15 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

Meridian Management Co. is an equity and fixed-income manager.

Its equity approach is value-oriented and keyed to buying deeply discounted stocks of viable companies. It stresses undervalued sectors, industries and issues that typically sell below book value and at relatively low multiples of normal earnings power.

Its fixed-income approach emphasizes undervalued securities and sectors investing in either high-grade or lower-grade issues depending on where the best opportunities exist.

Lee Bodenhamer, chairman, is chief investment officer; Ed Hamill, managing director, is client contact.

### Merrill Lynch Asset Management Inc.

Box 9011, Princeton, N.J. 08543; (609) 282-2000

| | |
|---|---|
| Total assets managed | $82,000,000,000 |
| Tax-exempt assets managed | $4,800,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 583 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 42 |
| Size of research staff | 4 |

Merrill Lynch Asset Management Inc. is an equity, fixed-income, balanced, international, options and mutual fund manager.

Its equity approach is value-oriented, focusing on Graham & Dodd analysis of low p/e, high reinvestment-rate companies.

Its active fixed-income approach emphasizes proper yield curve positioning through interest rate forecasting and yield curve analysis. Credit analysis and bond swaps also add value. It prefers short-maturity, high-quality issues.

Options are used.

The asset mix Jan. 1 was 44% stocks, 33% bonds and 23% cash. In 1987, Merrill Lynch's mutual funds under management were not included in total or tax-exempt assets reported.

The parent company is Merrill Lynch & Co.

Arthur Zeikel, president, is chief investment officer; Richard L. Reller, vice president, is client contact.

### Paul A. Merriman & Associates Inc.

1200 Westlake Ave. N, Suite 507, Seattle, Wash. 98109-3530; (206) 285-8877

| | |
|---|---|
| Total assets managed | $40,000,000 |
| Tax-exempt assets managed | $32,000,000 |
| Tax-exempt clients | 82 |
| Types of accounts managed | CFJ |
| No. of portfolio managers | 3 |
| Size of research staff | 1 |

Paul A. Merriman & Associates Inc. is an equity, fixed-income and balanced manager.

It manages all accounts using no-load mutual funds with multiple market-timing signals. It includes corporate and government bond funds, low- to high-risk equity funds, money market funds and gold funds. The timing of bond funds is based on trend-following techniques.

The asset mix Jan. 1 was 30% stocks, 10% bonds and 60% cash.

It follows 100 mutual funds closely.

Paul A. Merriman is chief investment officer and client contact.

### Merritt Easton Rae Management Ltd.

1703-1166 Alberni, Vancouver, British Columbia V6E 3Z3; (604) 688-9531

| | |
|---|---|
| Total assets managed | $16,000,000 |
| Tax-exempt assets managed: | |
| Total | $14,000,000 |
| For subsidiaries of U.S. firms | $0 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | U |
| No. of portfolio managers | 2 |

Merritt Easton Rae Management Ltd., a Canadian firm, is an equity, fixed-income and balanced manager.

Its equity approach uses growth stocks and market timing/tactical asset allocation. Its fixed-income is based on interest rate anticipation.

It follows 25 stocks closely and 60, generally; 5% of research is generated internally.

The parent company is Maplex Management & Holding Ltd.

Robert L. Merritt, president, is chief investment officer and client contact.

### Mesirow Asset Management

350 N. Clark St., Chicago, Ill. 60610; (312) 670-6023

| | |
|---|---|
| Total assets managed | $250,000,000 |
| Tax-exempt assets managed | $150,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 110 |
| Types of accounts managed | CF |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

Mesirow Asset Management is an equity, fixed-income and balanced manager.

Its equity approach is to buy stocks of established companies selling at low p/e multiples, with above-average yield.

Its fixed-income approach is passive, using maturities of 10 years or less and at least an A rating.

The parent company is Mesirow Financial Corp.

Stephen G. Gaber, managing director, is the chief investment officer; Phillip L. Barnett, managing director, is the client contact.

### Metropolitan Life Insurance

1 Madison Ave., New York, N.Y. 10010; (212) 578-6287

| | |
|---|---|
| Total assets managed | $86,085,000,000 |
| Tax-exempt assets managed: | |
| Total | $41,113,000,000 |
| Pooled accounts | $1,129,000,000 |
| Separate accounts | $192,000,000 |

| | |
|---|---|
| GICs | $14,615,000,000 |
| Annuities | $10,779,000,000 |
| Other | $14,998,000,000 |
| Real estate assets managed | $473,000,000 |
| Indexed assets managed | $222,000,000 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 298 |
| Types of accounts managed | CFGJ |
| No. of portfolio managers | 34 |
| Size of research staff | 109 |

Metropolitan Life Insurance Co. is an equity, fixed-income, balanced, real estate and GIC manager.

It offers passive and active equity management. Its active approach combines fundamental research and price sensitivity, seeking growth and emerging growth stocks.

Its fixed-income approach is based on interest rate anticipation. Incremental returns are added through analyses of the bond market, yield spreads, sectors and securities.

Its real estate approach is to invest in high-quality, well-located properties with strong income and excellent appreciation potential, to add value through property management and to diversify properties by type and location.

An additional $2.052 billion in tax-exempt assets are managed on its behalf by a subsidiary, State Street Research.

The separate account asset mix Jan. 1 was 38% stocks, 27% bonds, 21% cash and 16% equity real estate; $222 million was in equity index funds.

Robert G. Schwartz, chairman, is chief investment officer; Harvey M. Young, senior vice president, is client contact.

### Metropolitan Trust Co. of Canada

6 Crescent Road, Toronto, Ontario M4W 3K9; (416) 967-1813

| | |
|---|---|
| Total assets managed | $3,700,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,125,000,000 |
| For subsidiaries of U.S. firms | $0 |
| Real estate assets managed | $1,125,000,000 |
| Tax-exempt clients | 400 |
| Types of accounts managed | CEFGU |
| No. of portfolio managers | 20 |
| Size of research staff | 65 |

Metropolitan Trust Co. of Canada, a Canadian firm, is a fixed-income manager.

It designs specific mortgage investments to meet clients' long- and short-term requirements. Yield and security are emphasized as well as diversity through syndication.

The asset mix Jan. 1 was 99% mortgages and 1% mortgage-backed securities.

Clients include Air Canada, Alberta Government Telephones and Bimcor.

The parent company is Metropolitan Life Holdings Ltd.

Juri Koor, chairman and chief executive officer, is chief investment officer; Andrews F. Ross, vice president-corporate development, is client contact.

### MFM Capital Management

1400 N. Semoran Blvd., Orlando, Fla. 32807; (305) 282-0700

| | |
|---|---|
| Total assets managed | $1,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $1,000,000 |
| No. of portfolio managers | 2 |

MFM Capital Management Inc., a fixed-income and options manager, combines passive strategies, interest rate anticipation and sector analysis in its investment approach. Preservation of capital is stressed. Options, stock index futures and fixed-income futures are used. Pure equity positions are taken only in issues where no options exist.

John A. Maffei Jr. is the chief investment officer and the client contact.

### MH & Associates Securities Management Corp.

21030 Ventura Blvd., Suite 307, Woodland Hills, Calif. 91364; (818) 704-4633

| | |
|---|---|
| Total assets managed | $39,000,000 |
| Tax-exempt assets managed | $26,000,000 |
| Real estate assets managed | $1,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 18 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 2 |

MH & Associates Securities Management Corp. is a balanced manager.

Its equity approach is top-down asset allocation and sector emphasis. Low p/e, under-researched and institutionally underowned stocks with market capitalization of less than $1 billion are stressed.

Its fixed-income approach used interest rate anticipation.

J. Robert Meichelbock is the chief investment officer; John Heilman is the client contact.

### M&I Investment Management

770 N. Water St., Milwaukee, Wis. 53202; (414) 765-7770

| | |
|---|---|
| Total assets managed | $3,010,000,000 |
| Tax-exempt assets managed | $1,530,000,000 |
| Minimum separate account | $1,000,000 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 19 |
| Size of research staff | 3 |

M&I Investment Management Corp. is an equity, fixed-income and balanced manager.

Its equity approach emphasizes valuation, incorporating group dynamics and individual stock selection, with emphasis on medium- and large-capitalization companies.

It actively manages intermediate-term bonds, concentrating on preservation of principal within the context of total return.

The asset mix Jan. 1 was 29% stocks, 46% bonds, 23% cash and 2% other.

The parent company is Marshall & Ilsley Corp.

William J. Gumerman, president, is chief investment officer; Judith C. Murphy, vice president, is client contact.

### Michigan National Investment Corp.

30665 Northwestern Highway, Farmington Hills, Mich. 48333-9065; (313) 626-8200

See entry for INDEPENDENCE ONE INVESTMENT SERVICES.

### MidAmerica Management

4333 Edgewood Road N.E., Cedar Rapids, Iowa 52499; (319) 398-8985

| | |
|---|---|
| Total assets managed | $2,200,000,000 |
| Tax-exempt assets managed | $37,000,000 |
| Minimum separate account | $4,000,000 |
| Tax-exempt clients | 3 |
| Types of accounts managed | C |
| No. of portfolio managers | 3 |
| Size of research staff | 6 |

MidAmerica Management Corp., formerly Life Investors Management, is an equity, fixed-income and balanced manager.

Its equity approach is top-down, emphasizing asset allocation of defined assets and the macroeconomic outlook in determining fundamental investment values. Its fixed-income approach uses interest rate anticipation.

Options are used.

The parent company is Life Investors.

Patrick Falconio, president, is chief investment officer; Drew Washburn, senior financial analyst, is client contact.

### Midlantic National Bank

Metro Park Plaza, P.O. Box 600, Edison, N.J. 08818; (201) 321-8380

| | |
|---|---|
| Total assets managed | $3,560,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,589,000,000 |
| Commingled | $389,000,000 |
| Separate | $1,200,000,000 |
| 401(k)/457 assets managed | $50,000,000 |
| 401(k)/457 clients | 75 |
| Real estate assets managed | $175,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients: | |
| Commingled | 1,200 |
| Separate | 142 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 16 |
| Size of research staff | 3 |

Midlantic National Bank is an equity, fixed-income, balanced and immunized portfolio manager.

Its equity approach is value-oriented, emphasizing high quality, low p/e ratios, above-average yield and low price to book. Computer screening is used extensively in ranking stocks based on selection criteria. Performance premium primarily results from stock selection rather than sector emphasis.

Its fixed-income approach emphasizes low risk through high-quality portfolios, moderate maturity shift with laddered structure and average maturity ranging between six and 12 years.

Options are used.

The asset mix Jan. 1 was 37% stocks, 35% bonds, 17% cash and 11% mortgage-backed securities.

The parent company is Midlantic Corp.

William P. DuBose Jr., senior vice president, is chief investment officer; Walter T. Bednarz, asset management officer, is client contact.

### Mid-State Capital Management

1130 12th Ave., Altoona, Pa. 16601; (814) 946-6614

| | |
|---|---|
| Total assets managed | $475,000,000 |
| Tax-exempt assets managed: | |
| Total | $150,000,000 |
| Commingled | $115,000,000 |
| Separate | $35,000,000 |
| Real estate assets managed | $6,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients: | |
| Commingled | 100 |
| Separate | 60 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 4 |
| Size of research staff | 2 |

Mid-State Capital Management is an equity, fixed-income, balanced and convertible equities manager.

Its equity approach focuses on low p/e stocks, market timing/tactical asset allocation and quantitative approaches. Its fixed-income approach uses interest rate anticipation and sector analysis. Options are used.

The parent company is Keystone Financial Corp.

Ralph J. Davis, vice president, is chief investment officer and client contact.

### MIG Realty Advisors Inc.

1645 Palm Beach Lakes Blvd. Suite 600, West Palm Beach, Fla. 33401; (305) 686-1800

| | |
|---|---|
| Total assets managed | $519,000,000 |
| Tax-exempt assets managed | $519,000,000 |
| Real estate assets managed | $461,000,000 |
| Minimum separate account | $500,000 |
| Types of accounts managed | G |
| No. of portfolio managers | 1 |
| Size of research staff | 3 |

MIG Realty Advisors Inc., a real estate manager, invests in construction, debt and equity, and short- and intermediate-term financing.

The asset mix Jan. 1 was 11% cash, 32% equity real estate, 48% mortgages and 9% mortgage-backed securities.

Clients include Detroit Police & Fire, City of Philadelphia, City of Detroit General and Oakland County.

Larry E. Wright, executive vice president, is chief investment officer; Edwin B. Wayman, president, is client contact.

## Miller, Anderson & Sherrerd

2 Bala Plaza, Bala Cynwyd, Pa 19004; (215) 668-0850

| | |
|---|---|
| Total assets managed | $14,856,000,000 |
| Tax-exempt assets managed | $14,856,000,000 |
| 401(k)/457 assets managed | $18,000,000 |
| 401(k)/457 clients | 4 |
| Real estate assets managed | $2,900,000,000 |
| Minimum separate account | $35,000,000 |
| Tax-exempt clients | 101 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 14 |
| Size of research staff | 7 |

Miller, Anderson & Sherrerd is an equity, fixed-income and balanced manager.

Its equity decisions focus on a disciplined valuation process and investment strategy that combines quantitative analytical techniques, low p/e stocks and sector rotation.

Its fixed-income approach uses sector analysis. Securities are used to reduce overall portfolio risk and provide a positive real return with deflation protection. Three components are employed: intermediate maturity orientation, maturity management and value investing.

The asset mix Jan. 1 was 37% stocks, 36% bonds, 8% cash and 19% mortgage-backed securities.

It follows 100 stocks closely and 250 generally; 50% of research is generated internally.

Clients include Pennwalt, J.C. Penney and Yale University.

Frederic S. Owen, director of marketing, is client contact.

## MIMLIC Asset Management

400 N. Robert St., St. Paul, Minn. 55101; (612) 298-3826

| | |
|---|---|
| Total assets managed | $4,334,000,000 |
| Tax-exempt assets managed | $268,000,000 |
| Real estate assets managed | $5,000,000 |
| International assets managed | $6,000,000 |
| Index funds managed | $81,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 327 |
| Types of accounts managed | CF |
| No. of portfolio managers | 7 |
| Size of research staff | 11 |

MIMLIC Asset Management Co. is an equity, fixed-income, balanced and real estate manager.

Its equity approach uses Graham & Dodd analysis, a fundamental bottom-up style and investments primarily in dividend-paying common stocks of established companies.

Its fixed-income approach uses sector analysis. About 60% of assets are indexed to market duration; the remainder are invested in sectors viewed as undervalued or high yield.

Its real estate concentrates on major metropolitan growth areas.

The asset mix Jan. 1 was 60% stocks, 36% bonds, 2% cash and 2% mortgage-backed securities. The firm had $6 million in foreign stocks and $81 million in equity indexed funds.

The parent company is The Minnesota Mutual Life Insurance Co.

Clients include University of Minnesota, 3M and Baptist Hospital.

Joseph R. Bird, president, is chief investment officer; Jeffrey Winter, director of marketing, is client contact.

## Mississippi Valley Advisors

P.O. Box 387, St. Louis, Mo. 63166; (314) 425-3823

| | |
|---|---|
| Total assets managed | $3,100,000,000 |
| Tax-exempt assets managed: | |
| Total | $3,100,000,000 |
| Commingled | $70,000,000 |
| Separate | $3,030,000,000 |
| Real estate assets managed | $300,000,000 |
| Indexed assets managed | $45,000,000 |
| Dedicated assets managed | $910,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 30 |
| Separate | 270 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 11 |
| Size of research staff | 8 |

Mississippi Valley Advisors Inc. is an equity, fixed-income and balanced manager.

Its equity approach is quantitative; fundamental research and a valuation model are used to screen current vs. historical relative p/e ratios, estimated total returns over one and three years based on projected corporate earnings and relative p/es and its dividend discount model.

Its fixed-income approach uses sector analysis and maturity management. Options are used.

Real estate investments are made through a commingled fund owning shares of REITs.

The asset mix Jan. 1 was 30% stocks, 53% bonds, 7% cash and 10% mortgage-backed securities. As of the same date, the firm had $45 million in equity index funds.

The parent company is Mercantile Bancorpation Inc.

John H. Blixen II is chief investment officer; Ray C. Hayes, marketing director, is client contact.

## Mitchell Hutchins Asset Management Inc.

1285 Avenue of the Americas, New York, N.Y. 10803; (212) 713-2072

| | |
|---|---|
| Total assets managed | $15,610,000,000 |
| Tax-exempt assets managed | $1,012,000,000 |
| 401(k)/457 assets managed | $6,000,000 |
| 401(k)/457 clients | 1 |
| International assets managed | $9,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 70 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 21 |
| Size of research staff | 11 |

Mitchell Hutchins Asset Management Inc. is an equity, fixed-income, balanced, international and special equity manager.

Its equity approach is earnings growth-oriented with a valuation bias. Its fixed-income approach, as part of a balanced account, is based on interest rate anticipation and sector analysis.

The asset mix Jan. 1 was 61% stocks, 26% bonds and 13% cash.

The parent company is PaineWebber Inc.

Clients include Ford, Nashville, Duke University and Teamsters Local 408.

Cheryl K. Gruetzmacher, managing director of institutional asset management, is client contact.

## Mitchell Hutchins Institutional Investors Inc.

600 Fifth Ave., New York, N.Y. 10020; (212) 957-0760

| | |
|---|---|
| Total assets managed | $21,092,000,000 |
| Tax-exempt assets managed | $18,427,000,000 |
| Real estate assets managed | $897,000,000 |
| Index funds managed | $7,617,000,000 |
| Dedicated funds managed | $773,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 229 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 33 |
| Size of research staff | 9 |

Mitchell Hutchins Institutional Investors Inc., formerly Manufacturers Hanover Investment Corp., is an equity, fixed-income, balanced, international, venture capital, futures/options and indexing manager.

(MHIC was acquired by Mitchell Hutchins Asset Management Inc. Feb. 1.)

Its equity approach identifies attractive sectors and industries based on economic and market projections.

It offers passive and active fixed-income management. The active strategy uses relative market sector valuations and portfolio duration adjustments in response to the interest rate outlook.

Options and financial futures are used.

The asset mix Jan. 1 was 10% stocks, 56% bonds, 18% cash, 2% equity real estate, 2% mortgages and 12% mortgage-backed securities; $171 million was in equity index funds and $7.446 billion in bond index funds.

Stephen E. Canter, president, is chief investment officer; Robert J. Morello, senior vice president, is client contact.

## MLP Capital Formation

P.O. Box 2297, Orinda, Calif. 94563; (415) 253-1282

| | |
|---|---|
| Total assets managed | $14,000,000 |
| Tax-exempt assets managed | $5,000,000 |
| Real estate assets managed | $1,000,000 |
| International assets managed | $1,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |
| Size of research staff | 2 |

MLP Capital Formation is an asset-hunting manager.

Its equity approach focuses on resources-related companies and companies with undervalued assets. Growth and emerging growth stocks are targeted.

Its fixed-income approach is passive and uses interest rate anticipation.

Its real estate approach focuses on land in potential growth corridors.

The parent company is GPF Capital Formation.

Michael J. Perlman is the chief investment officer and client contact.

## Montag & Caldwell Inc.

2 Piedmont Center, Suite 500, Atlanta, Ga. 30326; (404) 262-3480

| | |
|---|---|
| Total assets managed | $534,000,000 |
| Tax-exempt assets managed | $334,000,000 |
| Dedicated assets managed | $20,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 65 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 4 |
| Size of research staff | 3 |

Montag & Caldwell Inc. is an equity, fixed-income and balanced manager.

For equity investment, it takes a bottom-up valuation approach that interrelates earnings momentum.

Its fixed-income approach is based on duration management, maximizing the probability of outperforming the market within an expected range of rate movement by adjusting maturity, coupon and issuer.

The firm follows 300 stocks closely and 800, generally; 60% of research is generated internally.

Clients include Multimedia, Goldkist, Alexander & Alexander Services and American Business Products.

Ronald E. Canakaris is president and chief investment officer; Homer W. Whitman Jr., vice president-client services, is client contact.

## Montrusco Associates Inc.

1000 Sherbrooke St. W., Suite 2300, Montreal, Quebec H3A 3G4; (514) 842-6464

| | |
|---|---|
| Total assets managed | $1,273,000,000 |
| Tax-exempt assets managed: | |
| Total | $878,000,000 |
| For subsidiaries of U.S. firms | $0 |
| Non-North American assets | $97,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 57 |
| Types of accounts managed | CEFU |
| No. of portfolio managers | 12 |

Montrusco Associates Inc., a Canadian firm, is an equity, fixed-income, balanced and international (EAFE) manager.

Its equity approach is based on business cycle analysis, with stock selection generated from a multivariable quantitative approach highlighting total expected return.

Its fixed-income approach uses a process that involves scenario identification, quarterly probability weighted expected interest rate forecasting and rigorous spread analysis.

The asset mix Jan. 1 was 31% Canadian stocks, 10% U.S. stocks, 47% bonds, 8% cash and 4% EAFE stocks.

Montreal Trusco Inc. holds a controlling interest in the firm.

Andre Marsan, president and chief executive officer, is chief investment officer and client contact.

## MONY Financial Services

4 Manhattanville Road, Purchase, N.Y. 10577; (914) 697-8506

| | |
|---|---|
| Total assets managed | $22,568,000,000 |
| Tax-exempt assets managed: | |
| Total | $8,240,000,000 |
| Pooled accounts | $2,181,000,000 |
| Separate accounts | $1,224,000,000 |
| GICs | $1,700,000,000 |
| Other | $3,135,000,000 |
| 401(k)/457 assets managed | $300,000,000 |
| 401(k)/457 clients | 300 |
| Dedicated assets managed | $475,000,000 |
| Minimum separate account | $10,000,000 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 11 |

MONY Financial Services is an equity, fixed-income, balanced, real estate, international and GIC manager.

Its equity approach seeks long-term capital growth by investing in stocks with above-average earnings growth. Its fixed-income approach uses interest rate anticipation. Options and financial futures are used.

Its real estate approach is long-term, concentrating on direct ownership of income-producing properties. The portfolio is diversified by location and type of property.

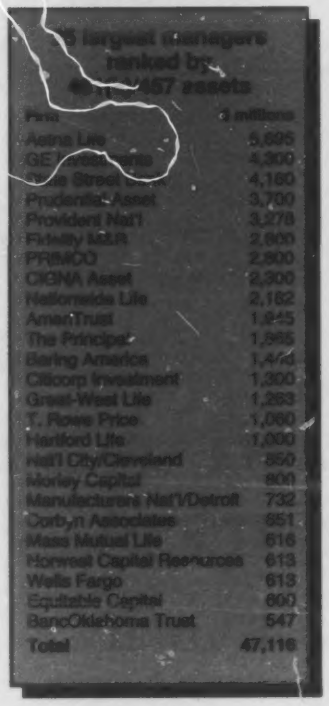
The separate account asset mix Jan. 1 was 30% stocks, 60% bonds and 10% cash.

The insurer follows 200 stocks closely and 500, generally; 50% of research is generated internally.

It offers portfolio insurance covering $7 million.

The parent company is Mutual Life Insurance Co. of New York.

Floyd L. Smith, executive vice president, is chief investment officer; Phillip N. Maisano, vice president-pension sales, is client contact.




## Moore & Schley

95 Madison Ave., Morristown, N.J. 07960; (201) 540-0540

| | |
|---|---|
| Total assets managed | $12,000,000 |
| Tax-exempt assets managed | $8,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

Moore & Schley is a fixed-income, balanced and GIC manager.

In stocks, it takes a growth and value approach.

Its fixed-income approach is passive and uses sector analysis. As an internal value-added approach, the primary objective is to provide relatively high and stable current income while avoiding undue risk to the value of the portfolio.

Elliot S. Collins and John K. Paoloni are the chief investment officers and client contacts.

## Moran Asset Management

41 W. Putnam Ave., Greenwich, Conn. 06830; (203) 869-5100

| | |
|---|---|
| Total assets managed | $167,000,000 |
| Tax-exempt assets managed | $153,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 12 |
| Types of accounts managed | CF |
| No. of portfolio managers | 2 |
| Size of research staff | 5 |

Moran Asset Management Inc., an equity manager, invests in companies with superior fundamental strengths that are medium size, established, successful and growing, where the equity securities are substantially undervalued on a real asset value basis.

The firm follows 100 stocks closely; all research is generated internally.

Frederick A. Moran, president, is the chief investment officer; David E. Kaplan, associate, is the client contact.

## Morgan Grenfell Capital Management Inc.

885 Third Ave., Suite 1740, New York, N.Y. 10022; (212) 230-2600

| | |
|---|---|
| Total assets managed | $171,000,000 |
| Tax-exempt assets managed | $130,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 6 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 5 |

Morgan Grenfell Capital Management Inc., an equity manager, uses a bottom-up approach to identify attractive emerging growth companies (with market capitalizations of $50 million to $500 million) and a top-down approach to select economic sectors.

The parent company is Morgan Grenfell Asset Management Ltd.

Clients include Pacific Telesis, Whittaker and Bechtel Power Group.

Robert E. Kern, executive vice president, is chief investment officer; James E. Minnick, executive vice president, is client contact.

## Morgan Grenfell Investment Services Ltd.

46 New Broad St., London EC2M 1NB U.K.; 01-256-7500

| | |
|---|---|
| Total assets managed | $2,789,000,000 |
| Tax-exempt assets managed | $2,378,000,000 |
| International assets managed | $2,378,000,000 |
| Minimum separate account | $15,000,000 |
| Tax-exempt clients | 44 |
| Types of accounts managed | CFG |
| No. of portfolio managers | 9 |
| Size of research staff | 12 |

Morgan Grenfell Investment Services Ltd. is an equity and fixed-income international manager.

It is an active global equity manager, using growth and low p/e stocks and market timing. Equal emphasis is placed on market and stock selection. No investments are made without considering the currency impact.

Its fixed-income approach combines active management of currencies, bond markets and maturities. Currency and bond market exposure decisions are separated through currency hedging.

The asset mix Jan. 1 was 86% stocks, 4% bonds and 10% cash. As of the same date, the firm had $2.043 billion invested in foreign stocks, $97 million in foreign bonds and $238 million in foreign cash.

The parent company is Morgan Grenfell Asset Management Ltd.

Clients include General Motors, Rockefeller Foundation, San Francisco City and County and Owens-Illinois.

Michael Bullock is chairman and chief investment officer. Client contact is James E. Minnick, executive vice president, Morgan Grenfell Capital Management Inc., (212) 230-2600.

## J.P. Morgan Investment Management Inc.

522 Fifth Ave., New York, N.Y. 10036; (212) 837-2300

| | |
|---|---|
| Total assets managed | $52,975,000,000 |
| Tax-exempt assets managed | $51,115,000,000 |
| Real estate assets managed | $5,243,000,000 |
| International assets managed | $3,000,000 |
| Dedicated funds managed | $6,500,000,000 |
| Tax-exempt clients | 410 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 43 |
| Size of research staff | 23 |

J.P. Morgan Investment Management Inc. offers equity, fixed-income, balanced, international, real estate, convertible, immunized fixed-income and oil and gas management, as well as portfolio protection.

Its equity approach is a focused internal analytical effort combined with disciplined valuation and portfolio construction. Stock selection is the most important element.

Its fixed-income approach is based on interest rate anticipation, with sector and yield spread analysis providing incremental return and lowering volatility.

Options and financial futures are used.

Its real estate approach is to make direct investments in special-situation projects that provide high current income, cash flow growth potential and high residual property appreciation.

The asset mix Jan. 1 was 36% stocks, 38% bonds, 7% cash, 3% equity real estate, 2% mortgages, 5% mortgage-backed securities, 3% convertibles and 6% international.

The parent company is J.P. Morgan & Co. Inc.

C. Nicholas Potter, president, is chief investment officer; John B. Thomas, managing director, is client contact.

### Morgan Stanley Asset Management

1633 Broadway, New York, N.Y. 10019; (212) 703-2752

| | |
|---|---|
| Total assets managed | $12,448,000,000 |
| Tax-exempt assets managed | $3,292,000,000 |
| Real estate assets managed | $829,000,000 |
| International assets managed | $9,000,000 |
| Dedicated funds managed | $187,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 164 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 23 |
| Size of research staff | 4 |

Morgan Stanley Asset Management is an equity, fixed-income, balanced, international/global and high-yield manager.

Its equity approach combines market sector allocation with a growth- and value-oriented selection process. Top-down and bottom-up elements are used.

Its fixed-income approach concentrates on active maturity shifting, with short- and intermediate-term holdings comprising the portfolio core. Long-term bonds are used opportunistically.

The asset mix Jan. 1 was 34% stocks, 46% bonds, 10% cash and 10% mortgage-backed securities; $9 million was in foreign bonds.

The parent company is Morgan Stanley Group Inc.

In addition to the assets above, Morgan Stanley Asset Management is fiduciary for $8.811 billion, of which $7.825 billion is tax-exempt.

Barton M. Biggs, chairman, is chief investment officer; Perry E. Hall II, principal, and Gail Hunt Reeke, vice president, are client contacts.

### Morgan Stanley Asset Management/The Chicago Group

440 S. LaSalle St., Chicago, Ill. 60605; (312) 765-6035

| | |
|---|---|
| Total assets managed | $294,000,000 |
| Tax-exempt assets managed | $135,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 25 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 5 |
| Size of research staff | 1 |

Morgan Stanley Asset Management/The Chicago Group is an equity and balanced manager. It takes a classical value approach to equities; portfolios always have a lower-than-market p/e ratio and price-to-book ratio with higher-than-market yield.

Its fixed-income approach emphasizes high-quality liquid bonds and takes advantage of anomalies in the one- to seven-year maturity range of the yield curve.

Clients include Lord Corp., Garan Inc. and Bally Manufacturing.

Thomas S. White Jr. is the chief investment officer; Michael A. Crowe, vice president, is the client contact.

### Morison Asset Management

1201 Marquette, Minneapolis, Minn. 55403; (612) 332-1588

See entry for INDEPENDENCE ONE INVESTMENT SERVICES.

### Morley Capital Management

5285 S.W. Meadows Road, Suite 400, Lake Oswego, Ore. 97035; (503) 635-5414 or (800) 548-4806

| | |
|---|---|
| Total assets managed | $2,285,000,000 |
| Tax-exempt assets managed | $2,285,000,000 |
| 401(k)/457 assets managed | $800,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 33 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 4 |
| Size of research staff | 3 |

Morley Capital Management Inc., a GIC manager, focuses on yield management. It uses GICs to increase returns through reduction of risk and selection of contract terms, maturities and denominations. Portfolios are diversified by maturity and carrier.

The asset mix Jan. 1 was 2% cash and 98% GICs.

Half the research is generated internally.

The parent company is Morley Financial Services Inc.

Clients include Occidental Petroleum, Bush Foundation, Southern California Edison and Alcoa.

Harold L. Morley, president, is chief investment officer; Peter L. Jurney, vice president-marketing, is client contact.

### Mt. Auburn Management

79 Milk St., Boston, Mass. 02109; (617) 423-7707

| | |
|---|---|
| Total assets managed | $30,000,000 |
| Tax-exempt assets managed | $23,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 3 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 1 |

Mt. Auburn Management, an equity manager, uses growth and emerging growth stocks and sector rotation in extremely concentrated portfolios.

The firm follows 25 stocks closely and 100 generally; 50% of the research is generated internally.

Clients include Kerr-McGee and Taconic Foundation.

Alan J. Dworsky is the chief investment officer and the client contact.

### Mount Lucas Management

701 Mount Lucas Road, Princeton, N.J. 08540; (609) 924-8868

| | |
|---|---|
| Total assets managed | $50,000,000 |
| Tax-exempt assets managed | $50,000,000 |
| Minimum separate account | $30,000,000 |
| Tax-exempt clients | 1 |
| Types of accounts managed | C |
| No. of portfolio managers | 7 |
| Size of research staff | 4 |

Mount Lucas Management Corp. is a commodity futures manager.

The firm forms a futures investment portfolio by allocating capital based on internal research and its proprietary approach to design technology.

The investment portfolio employs a mix of approaches with different trading characteristics to ensure the overall portfolio is balanced and will perform well in varying market environments. The portfolio incorporates trading in all major futures markets.

Frank L. Vannerson, senior vice president, is the chief investment officer; Grant W. Schaumburg Jr., president, is the client contact.

### Mount Vernon Associates Inc.

16 E. Eager St., Baltimore, Md. 21202; (301) 539-5588

| | |
|---|---|
| Total assets managed | $314,000,000 |
| Tax-exempt assets managed | $295,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 17 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 4 |

Mount Vernon Associates Inc. is an equity, fixed-income, balanced and stock options manager.

Its top-down equity approach emphasizes growth and low p/e stocks and sector rotation. The firm uses an alternative investment method along with a quantitative model for avoiding risk.

Its fixed-income approach focuses on interest rate anticipation and high-quality marketable issues.

It follows 50 stocks closely and 150 generally; 60% of research is generated internally.

Clients include Arlington County, Dyncorp, University of Maryland and National Lutheran Home for the Aged.

William J. Heffner, president, is the chief investment officer and the client contact.

### MPT Associates Inc.

630 Fifth Ave. Suite 2670, New York, N.Y. 10111; (212) 247-5858

| | |
|---|---|
| Total assets managed | $800,000,000 |

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**Employee Communications Support.** Fidelity will work with you to develop the communication materials needed to support your employees from enrollment through retirement. We'll help you explain your program and the available investment options clearly and effectively. In addition, your employees can call toll-free 24 hours a day, seven days a week and talk with a knowledgeable Fidelity representative about available investment options.

For more information about Fidelity's defined contribution plan services, including fund prospectuses covering management fees, expenses, and applicable sales charges, please call Jeffrey Paster, Corporate Market Manager, at 1-800-345-5033. In Massachusetts call collect 617-570-5692.

Fidelity Investments
Institutional Services Company

Fidelity Distributors Corporation
General Distribution Agent For Over 100 Funds, 82 Devonshire Street, Boston, Massachusetts 02109
Atlanta, Boston, Chicago. Dallas, Detroit, Houston, Los Angeles, New York, Philadelphia, San Francisco, Sarasota

Tax-exempt assets managed ... $850,000,000
Minimum separate account ..... $1,000,000
Tax-exempt clients ..... 25
Types of accounts managed ..... CEJ
No. of portfolio managers ..... 3
Size of research staff ..... 2

MPT Associates Inc. is an equity and balanced manager.

Its equity approach is quantitative and goal-oriented. Index options are used to hedge equity portfolios.

Its fixed-income approach is passive, with investment-grade portfolios constructed around the Shearson Lehman Government/Corporate bond index.

Portfolio insurance covers $220 million in assets.

The asset mix Jan. 1 was 88% stocks, 6% bonds, 5% cash and 1% other.

The firm follows 200 stocks closely and 1,300, generally; 10% of research is generated internally.

The parent is Lincoln National Corp.

Clients include Ironworkers Locals 40, 361 & 417, American Chemical Society and Sisters of the Holy Cross.

Gerald Goodwin, president, is chief investment officer; F. Allen Dudley, vice president, is client contact.

## MRealty Corp.

1717 Main St., Dallas, Texas 75201; (214) 290-3470

Total assets managed ..... $330,000,000
Tax-exempt assets managed ..... $77,000,000
Minimum separate account ..... $10,000,000
Tax-exempt clients ..... 77
Types of accounts managed ..... CEF

MRealty Corp., a real estate manager, focuses on properties that are not under intense price competition — with yields better that 9% — yet pass strict criteria of growth demographics, stable area, high occupancy, credit tenants and excellent construction.

The parent company is MCorp.

Clients include Dallas Transit System, DFW Airport Board and Lone Star Distributing.

Frank W. Tilley is the chief investment officer and the client contact.

## MSecurities Corp.

P.O. Box 65545, Dallas, Texas 75265; (214) 290-3452

Total assets managed ..... $1,341,000,000
Tax-exempt assets managed:
Total ..... $837,000,000
Commingled ..... $515,000,000
Separate ..... $322,000,000
Minimum separate account ..... $5,000,000
Tax-exempt clients:
Commingled ..... 700
Separate ..... 19
Types of accounts managed ..... CEFG
No. of portfolio managers ..... 5

MSecurities Corp. is an equity, fixed-income and balanced manager.

Its equity approach combines growth stocks and sector rotation. Its fixed-income approach is top-down and uses financial statistics research to establish interest rates. Options are used.

The asset mix Jan. 1 was 41% stocks, 23% bonds and 36% cash.

Clients include City of Dallas, City of Fort Worth and Trinity University.

The parent company is MCorp.

Hilton Hemphill is the chief investment officer; Steven T. Gold, vice president, is the client contact.

## MT Associates Investment Counsel Inc.

67 Yonge St. Suite 100, Toronto, Ontario M5E 1J8; (416) 860-0616

Total assets managed ..... $1,400,000,000
Tax-exempt assets managed:
Total ..... $1,170,000,000
For subsidiaries of U.S. firms $1,100,000,000
Real estate assets managed ..... $1,000,000
Dedicated assets ..... $300,000,000
Minimum separate account ..... $5,000,000
Tax-exempt clients ..... 104
U.S. subsidiaries ..... 73
Types of accounts managed ..... CEFGU
No. of portfolio managers ..... 11
Size of research staff ..... 2

MT Associates Investment Counsel Inc., a Canadian firm, is an equity, fixed-income and balanced manager.

Its equity approach is disciplined and value-oriented, using proprietary screens and systems, as well as extensive internal research to identify undervalued stocks.

Its fixed-income approach uses a low-risk, duration-based strategy combined with active exploitation of market inefficiencies.

The asset mix Jan. 1 was 40% Canadian stocks, 5% U.S. stocks, 45% bonds and 10% cash; $1 million was in mortgages.

It follows 100 stocks closely and 225, generally; 70% of research is generated internally.

Montreal Trust owns 51% of the firm.

Alex Wilson, principal, is chief investment officer; Keith Luptcn, principal, is client contact.

## MTrust Corp.

P.O. Box 2320, Dallas, Texas 75221-2320; (214) 290-3285

Total assets managed ..... $2,653,000,000
Tax-exempt assets managed .. $1,042,000,000
401(k)/457 assets managed .... $150,000,000
401(k)/457 clients ..... 90
Real estate assets managed ..... $42,000,000
Minimum separate account ..... $5,000,000
Tax-exempt clients ..... 1,400
Types of accounts managed ..... CEFJG
No. of portfolio managers ..... 13

MTrust Corp. is an equity, fixed-income, balanced, real estate, international, GIC and oil and gas manager.

Its equity approach employs Graham & Dodd analysis, low p/e securities and market timing. It seeks rotational growth in both large- and small-cap stocks, and manages a value fund.

Its fixed-income approach is passive, emphasizing interest rate anticipation. It also uses laddered maturities to take advantage of the yield curve.

Its real estate approach concentrates on investment-grade, income-producing properties; appreciation is also a consideration.

The asset mix Jan. 1 was 35% stocks, 25% bonds, 36% cash and 4% equity real estate; of its total assets, $1.1 billion is managed on its behalf by MSecurities.

The parent company is MCorp.

Clients include Texas Utilities Inc., Southwest Airlines, Southwest Public Service Co. and Texas Eastern.

Hilton Hemphill is chief investment officer; Bill Rush, (214) 290-3385, and Lonnie Parr, (713) 751-7278, are client contacts.

## Mu-Cana Investment Counselling

227 King St. S., Waterloo, Ontario N2J 4C5; (519) 888-2750

Total assets managed ..... $3,700,000,000
Tax-exempt assets managed:
Total ..... $3,000,000,000
For subsidiaries of U.S. firms $365,000,000
Dedicated assets ..... $80,000,000
Tax-exempt clients ..... 99
U.S. subsidiaries ..... 20
Types of accounts managed ..... CEFGU
No. of portfolio managers ..... 11
Size of research staff ..... 1

Mu-Cana Investment Counselling, a Canadian firm, is a balanced manager. It accepts only Canadian balanced fund accounts.

A top-down approach is followed for asset mix. Equity selection is based on fundamental value analysis; bond selection is based on interest rate anticipation and duration targeting. Trading activity tends to be below average.

The asset mix Jan. 1 was 28% Canadian stocks, 10% U.S. stocks, 55% bonds and 7% cash.

It follows 100 stocks closely and 300, generally; 75% of research is generated internally.

Clients include Ashland Oil, Benjamin Moore and General Foods.

The parent company is Mutual Life of Canada.

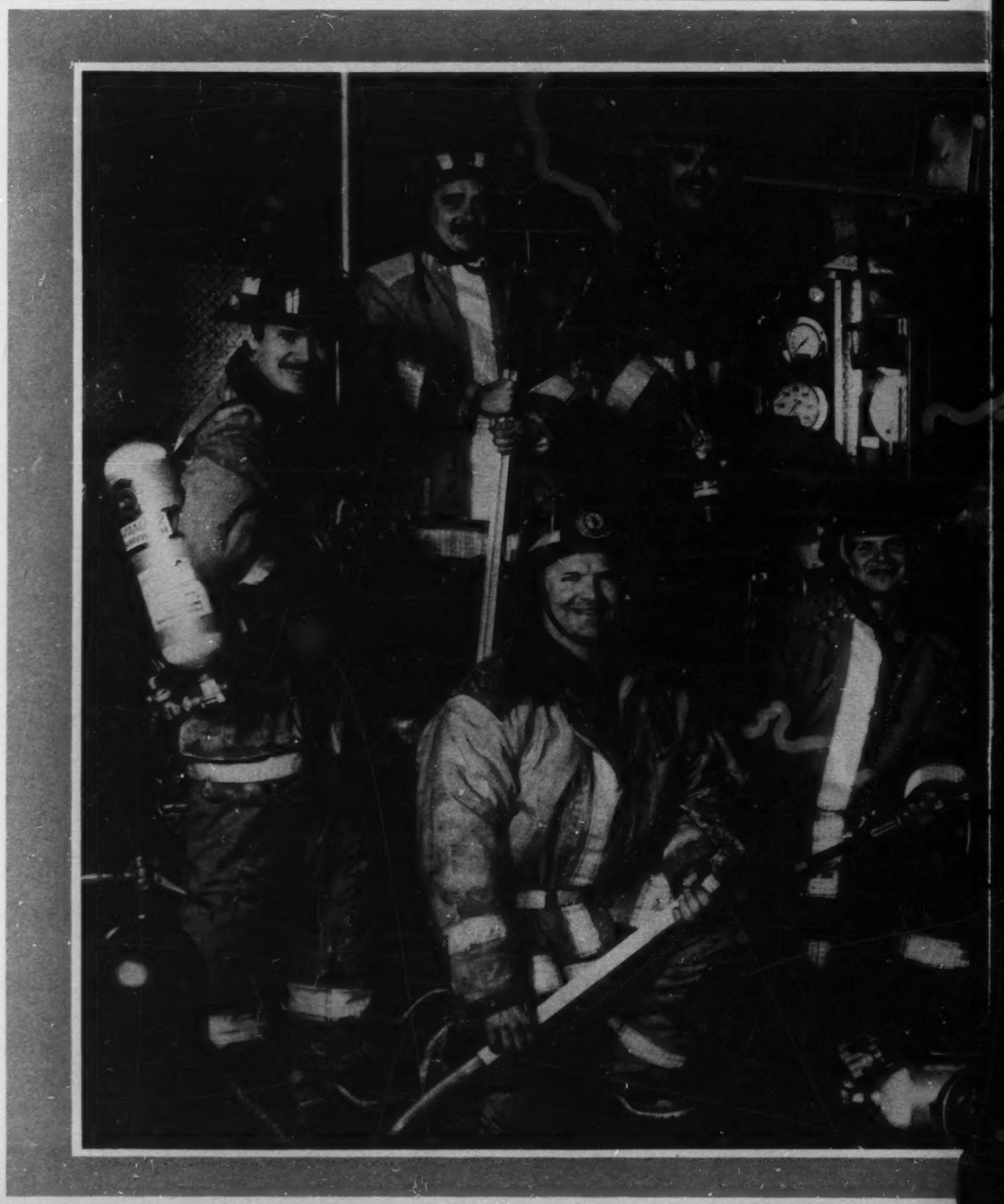
Ted Brough, president, is chief investment officer; David Paleczny, senior vice president-marketing and administration, is client contact.

## Muhlenkamp & Co. Inc.

12300 Perry Highway, Wexford, Pa. 15090; (412) 935-5520

Total assets managed ..... $29,000,000
Tax-exempt assets managed .... $16,000,000
Minimum separate account ..... $200,000
Tax-exempt clients ..... 24
Types of accounts managed ..... CEFG
No. of portfolio managers ..... 1
Size of research staff ..... 1

Muhlenkamp & Co. Inc. is an equity,



PROFILES

fixed-income and balanced manager.

Its equity approach emphasizes low p/e stocks and Graham & Dodd analysis. Its fixed-income approach is based on interest rate anticipation.

The firm follows 150 stocks closely and 1,700 generally; 60% of the research is generated internally.

Ronald H. Muhlenkamp is the chief investment officer and the client contact.

### Munder Capital Management

260 E. Brown St., Suite 100, Birmingham, Mich. 48011; (313) 647-9200

| | |
|---|---|
| Total assets managed | $1,007,000,000 |
| Tax-exempt assets managed | $841,000,000 |
| Dedicated funds managed | $117,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 66 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 7 |
| Size of research staff | 11 |

Munder Capital Management Inc. is an equity, fixed-income, balanced and convertible manager.

Its equity approach emphasizes growth and emerging growth stocks in a bottom-up, disciplined style to identify companies with superior fundamental and value characteristics to the overall market.

Its fixed-income approach mixes active, passive and quantitative methods to match the clients' level of risk. The firm analyzes sector and yield curve and manages effective duration and convexity.

The asset mix Jan. 1 was 19% stocks, 68% bonds, 10% cash and 3% other.

The parent company is Security Pacific Corp.

Lee Munder, president, is chief investment officer; Bill McCowen, director of marketing, is client contact.

### Mutual of America Life Insurance Co.

666 Fifth Ave., New York, N.Y. 10103; (212) 399-1600

| | |
|---|---|
| Total assets managed | $3,332,000,000 |
| Tax-exempt assets managed: | |
| Total | $3,332,000,000 |
| Pooled accounts | $549,000,000 |
| GICs | $37,000,000 |
| Other | $2,746,000,000 |
| 401(k)/457 assets managed | $2,000,000 |
| 401(k)/457 clients | 1 |
| Tax-exempt clients | 12,000 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 5 |
| Size of research staff | 4 |

Mutual of America Life Insurance Co. is an equity, fixed-income and balanced manager.

Its equity approach is to emphasize companies with above-average earnings prospects. Options are used.

Its fixed-income approach uses interest rate anticipation and sector analysis, taking advantage of changing opportunities in market relationships.

The separate account asset mix Jan. 1 was 90.4% stocks, 7.8% bonds, 0.6% cash and 1.2% other.

The insurer follows 150 stocks closely and 300, generally; 50% of research is generated internally.

Clients include American Cancer Society, Girl Scouts and United Way.

Joan M. Casson is senior vice president and chief investment officer; Howard Lichtenstein, senior vice president-consulting services, is client contact.

### Mutual Benefit Life Insurance Co.

520 Broad St., Newark, N.J. 07101; (201) 481-8600

| | |
|---|---|
| Total assets managed | $9,914,000,000 |
| Tax-exempt assets managed: | |
| Total | $5,332,000,000 |
| Separate accounts | $87,000,000 |
| GICs | $2,557,000,000 |
| Annuities | $126,000,000 |
| Other | $2,582,000,000 |
| 401(k)/457 assets managed | $15,000,000 |
| 401(k)/457 clients | 275 |
| Minimum separate account | $1,000,000 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 7 |
| Size of research staff | 7 |

The Mutual Benefit Life Insurance Co. is an equity, fixed-income, real estate and GIC manager.

Its equity approach follows Graham & Dodd principles. It seeks oversold, underfollowed and undervalued issues.

Its fixed-income approach uses immunization. It is primarily concerned with the highest after-tax yield and matching of asset liability and maturity.

Its real estate approach seeks to obtain smaller properties that are diversified by type and location to afford a greater degree of diversity within portfolios.

The separate account asset mix Jan. 1 was 64% stocks, 2% cash, 7% equity real estate and 27% mortgages.

Markston Investment Management, a subsidiary, manages about $186 million in tax-exempt assets for Mutual Benefit Life.

Ted D. Simmons, vice chairman, is chief investment officer; Michael K. Farrell, vice president-group pension sales and marketing, is client contact.

### Mutual Service Life Insurance Co.

P.O. Box 64035, St. Paul, Minn. 55164; (612) 631-7000

| | |
|---|---|
| Total assets managed | $420,000,000 |
| Tax-exempt assets managed: | |
| Total | $281,000,000 |
| Pooled accounts | $20,000,000 |
| GICs | $57,000,000 |
| Annuities | $45,000,000 |
| Other | $159,000,000 |
| 401(k)/457 assets managed | $11,000,000 |
| International assets managed | $2,000,000 |
| Tax-exempt clients | 11 |
| Types of accounts managed | C |
| No. of portfolio managers | 3 |
| Size of research staff | 4 |

Mutual Service Life Insurance Co. is a fixed-income, balanced and GIC manager.

Its equity approach in balanced accounts is value-oriented and risk averse, stressing low volatility and consistency of return. Its fixed-income approach uses interest rate anticipation.

The insurer follows 30 stocks closely and 200, generally; 10% of research is generated internally.

Its clients include National Cooperative Refinery, Cenex, Land O'Lakes and Universal Cooperatives.

Loren A. Haugland, senior vice president-investments and finances, is chief investment officer; David M. LaClare, director-pension financial sales and services, is client contact.

## N

### Narragansett Capital Inc

50 Kennedy Plaza, Providence, R.I. 02903; (401) 751-1000

| | |
|---|---|
| Total assets managed | $500,000,000 |
| Tax-exempt assets managed | $185,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 15 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 5 |
| Size of research staff | 4 |

Narragansett Capital Inc. is an equity manager in leveraged buy-outs, taking equity positions in transactions made by the firm.

Clients include United Technologies, GTE and Honeywell.

Arthur D. Little, Gregory P. Barber, Robert D. Manchester, Jonathan M. Nelson and Roger A. Vandenberg, managing directors, are chief investment officers; Mr. Little is client contact.

### National Bank of Detroit

611 Woodward Ave., Detroit, Mich. 48226; (313) 225-2820

| | |
|---|---|
| Total assets managed | $8,900,000,000 |
| Tax-exempt assets managed: | |
| Total | $4,400,000,000 |
| Commingled | $2,400,000,000 |
| Separate | $2,000,000,000 |
| 401(k)/457 assets managed | $71,000,000 |
| 401(k)/457 clients | 55 |
| Real estate assets managed | $119,000,000 |
| International assets managed | $8,000,000 |
| Indexed assets managed | $215,000,000 |
| Dedicated assets managed | $300,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients: | |
| Commingled | 850 |
| Separate | 150 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 15 |
| Size of research staff | 13 |

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National Bank of Detroit is an equity, fixed-income, balanced and international/global manager.

Its equity approach emphasizes value and earnings growth. Its fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 40% stocks, 50% bonds and 10% cash; $119 million was in mortgage-backed securities, $8 million in foreign stocks, $148 in equity index funds and $67 million in bond index funds.

The bank follows 175 stocks closely and 480, generally; 80% of research is generated internally.

The parent is NBD Bancorp.

Clients include GM, Detroit Edison, Kresge Foundation and International United Auto Workers.

James M. Lane, senior vice president, is chief investment officer; John Karl Broman, assistant vice president, is client contact.

## National City Bank, Cleveland

1900 E. Ninth St., Cleveland, Ohio 44114-3484; (216) 575-2571

| | |
|---|---|
| Total assets managed | $6,598,000,000 |
| Tax-exempt assets managed: | |
| Total | $3,019,000,000 |
| Commingled | $429,000,000 |
| Separate | $2,590,000,000 |
| 401(k)/457 assets managed | $850,000,000 |
| Real estate assets managed | $130,000,000 |
| International assets managed | $75,000,000 |
| Dedicated assets managed | $80,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients: | |
| Commingled | 350 |
| Separate | 100 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 4 |
| Size of research staff | 10 |

National City Bank, Cleveland is an equity, fixed-income and balanced manager.

Its equity approach focuses on a company's market, competitive advantage, management, return on equity and growth potential.

In fixed income, maturity structures of portfolios are adjusted in anticipation of interest rate changes.

The asset mix Jan. 1 was 55% stocks, 35% bonds, 5% cash and 5% mortgage-backed securities. As of the same date, it had $45 million in foreign stocks and $30 million in foreign bonds.

Clients include Harris Corp., Roadway Services and Case Western Reserve University.

The parent company is National City Corp.

Larry Kekst and David B. Hiller, vice presidents, are the chief investment officers; Richard Wainio, vice president, is the client contact.

## National Investment Services of America Inc.

815 E. Mason St. Suite 1501, Milwaukee, Wis. 53202; (414) 271-6540

| | |
|---|---|
| Total assets managed | $5,329,000,000 |
| Tax-exempt assets managed | $4,979,000,000 |
| 401(k)/457 assets managed | $50,000,000 |
| 401(k)/457 clients | 1 |
| Real estate assets managed | $400,000,000 |
| Index funds managed | $200,000,000 |
| Dedicated funds managed | $4,275,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 39 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 9 |
| Size of research staff | 2 |

National Investment Services of America Inc. is an equity, fixed-income, balanced and structured liability linked accounts manager.

Its equity approach uses growth stocks, believing earnings momentum is the central influence on price.

Its fixed-income approach offers active, immunized or dedicated and indexed portfolios, using interest rate anticipation or sector analysis. Its "spanning technology" links assets to plan liabilities assuring funding levels using both stocks and bonds.

The asset mix Jan. 1 was 5% stocks, 85% bonds and 10% mortgage-backed securities. As of the same date, the firm had $200 million in bond indexed funds.

Clients include Ameritech, U S WEST and Eastern Airlines.

Joseph E. Gorman, president, is the chief investment officer; Mary Jo Dempsey, vice president, is the client contact.

## National Trust Co.

21 King St. E., Third Floor, Toronto, Ontario M5C 1B3; (416) 361-3887

| | |
|---|---|
| Total assets managed | $7,092,000,000 |
| Tax-exempt assets managed: | |
| Total | $2,012,000,000 |
| For subsidiaries of U.S. firms | $136,000,000 |
| Real estate assets managed | $21,000,000 |
| Non-North American assets | $92,000,000 |
| Indexed assets managed | $87,000,000 |
| Minimum separate account | $6,300,000 |
| Tax-exempt clients | 26 |
| Types of accounts managed | CEFU |
| No. of portfolio managers | 3 |
| Size of research staff | 4 |

National Trust Co., a Canadian firm, is an equity, fixed-income, balanced and specialized pooled fund manager.

Its equity approach is driven by theme investing supported by computer screens to identify undervalued sectors or stocks. Tactical asset allocation is used.

Based on interest rate anticipation and sector analysis, its fixed-income approach emphasizes quality and marketability of holdings, actively trading to maximize returns.

The asset mix Jan. 1 was 30% Canadian stocks, 10% U.S. stocks, 44% bonds and 16% cash; $21 million was in mortgages and $87 million in equity index funds.

It follows 180 stocks closely and 290 generally.

The parent company is National Victoria and Grey Trustco Ltd.

John C. Crocker, senior vice president-pension investments, is chief investment officer; Barbara H. Johnson, director-pension investment marketing, is client contact.

## Nationwide Life Insurance

1 Nationwide Plaza, Columbus, Ohio 43216; (614) 249-7111

| | |
|---|---|
| Total assets managed | $7,285,000,000 |
| Tax-exempt assets managed: | |
| Total | $3,934,000,000 |
| Pooled accounts | $926,000,000 |
| Separate accounts | $86,000,000 |
| GICs | $37,000,000 |
| Annuities | $295,000,000 |
| Other | $2,590,000,000 |
| 401(k)/457 assets managed | $2,182,000,000 |
| Minimum separate account | $10,000,000 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 29 |

Nationwide Life Insurance Co. is an equity, fixed-income and balanced manager.

Its equity approach combines Graham & Dodd analysis with emerging growth, growth and low p/e stocks, and sector rotation. It substantially overweights attractive industries.

Its fixed-income approach discerns relative value in different sectors.

The separate account asset mix Jan. 1 was 60% stocks, 30% bonds and 10% cash.

The insurer follows 100 stocks closely and 1,000, generally; 5% of research is generated internally.

Nationwide Insurance Group is the parent company.

Peter F. Frenzer, executive vice president-investments, is chief investment officer; John H. Williams, compliance officer, is client contact.

## NCM Capital Management Group Inc.

2 Mutual Plaza, 501 Willard St., Durham, N.C. 27701-3642; (919) 688-0620

| | |
|---|---|
| Total assets managed | $130,000,000 |
| Tax-exempt assets managed | $50,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 5 |
| Types of accounts managed | CFG |
| No. of portfolio managers | 2 |

NCM Capital Management Group Inc. is an equity, fixed-income and balanced manager.

Its equity approach screens for low p/e, positive earnings momentum, positive earnings surprise and quality.

Its fixed-income approach uses duration and sector management. The trading portion may be in cash equivalents, intermediate or long-term treasuries, based on short-term price expectations.

The parent company is North Carolina Mutual Life Insurance Co.

### 25 largest managers of dedicated/immunized bond portfolios

| Firm | $ millions |
|---|---|
| J.P. Morgan | 6,500 |
| Prudential Asset | 4,913 |
| Nat'l Investment Services | 4,275 |
| Bankers Trust | 3,634 |
| CIGNA Asset | 2,155 |
| GE Investments | 1,900 |
| Mellon Bond | 1,664 |
| Chase Investors | 1,338 |
| Lincoln Capital | 924 |
| Mississippi Valley | 910 |
| Mitchell Hutchins Inst'l | 773 |
| BEA Associates | 697 |
| Putnam Cos. | 597 |
| Ward & Wiesner Capital | 577 |
| First Wisconsin Trust | 572 |
| McGlinn Capital | 550 |
| Wright Investors' | 497 |
| Wells Fargo | 496 |
| Equitable Capital | 483 |
| MONY Financial | 475 |
| Dewey Square | 420 |
| Security Pacific | 375 |
| Irving Trust | 367 |
| Pittsburgh Nat'l | 342 |
| Harris Trust & Savings | 341 |
| **Total** | **35,775** |

Maceo K. Sloan is the chief investment officer; Justin F. Beckett, director of marketing, is the client contact.

## NCNB National Bank

1 NCNB Plaza (TO9-1), Charlotte, N.C. 28255; (704) 374-8405

| | |
|---|---|
| Total assets managed | $6,641,000,000 |
| Tax-exempt assets managed: | |
| Total | $3,072,000,000 |
| Commingled | $1,661,000,000 |
| Separate | $1,411,000,000 |
| 401(k)/457 assets managed | $10,000,000 |
| 401(k)/457 clients | 100 |
| Real estate assets managed | $850,000,000 |
| Indexed assets managed | $25,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Separate | 1,736 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 13 |
| Size of research staff | 7 |

NCNB National Bank is an equity, fixed-income, balanced and real estate manager.

Its equity approach uses top-down analysis and sector rotation as it seeks value within stages of the economic cycle. Securities are selected based on relative and absolute value criteria.

Its fixed-income approach focuses on duration relative to the Shearson index with value added by sector swaps and interest rate anticipation.

Its real estate approach is to invest in commercial and industrial properties in the Southeast, with an emphasis on office and business parks leased to quality tenants.

The asset mix Jan. 1 was 45% stocks, 30% bonds, 5% cash and 20% equity real estate; $100 million was in mortgage-backed securities and $25 million in bond index funds.

Clients include Potomac Electric and Power, Shell Oil and World Bank.

The parent company is NCNB Corp.

Donald G. Berdine, senior vice president, is chief investment officer; David J. Cathcart, senior vice president, is client contact.

## Nelson, Benson & Zellmer

455 Sherman St. Suite 100, Denver, Colo. 80203; (303) 778-6800

| | |
|---|---|
| Total assets managed | $379,000,000 |
| Tax-exempt assets managed | $261,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 35 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 4 |

Nelson, Benson & Zellmer Inc. is an equity, fixed-income and balanced manager.

A bottom-up, growth stock manager, the firm stresses three elements of fundamental financial analysis: growth of earnings, return on equity and quality of management.

Its fixed-income approach is passive, focusing on high quality and intermediate maturity.

The firm follows 100 stocks closely and 300, generally; 40% of the research is generated internally.

W. Peterson Nelson, president, is the chief investment officer; John A. Benson, executive vice president, is the client contact.

## Nelson Capital Management

525 University Ave. Suite 810, Palo Alto, Calif. 94301; (415) 326-0200

| | |
|---|---|
| Total assets managed | $135,000,000 |
| Tax-exempt assets managed | $52,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 21 |
| Types of accounts managed | CF |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

Nelson Capital Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach combines fundamental analysis with a valuation model to uncover growing companies with strong earnings trends and high potential returns. Its fixed-income approach focuses on high quality and liquidity, but also considers interest rate fluctuations, market inefficiencies, yield curve analysis and duration.

Stock index and fixed-income futures are used.

Philip S. Nelson is the chief investment officer; Suanne M. Ramar is the client contact.

## Neuberger and Berman

522 Fifth Ave., New York, N.Y. 10036; (212) 790-9669

| | |
|---|---|
| Total assets managed | $13,148,000,000 |
| Tax-exempt assets managed | $6,581,000,000 |
| 401(k)/457 assets managed | $262,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 269 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 14 |
| Size of research staff | 13 |

Neuberger and Berman is an equity, fixed-income and balanced manager.

Its equity approach adheres to a market-oriented, value-driven style, emphasizing undervalued stock selections, along with a flexible asset mix strategies.

Its fixed-income approach adheres to a limited maturity market-oriented, value-driven style, emphasizing undervalued sector selections and interest rate trend related maturity/duration flexibility.

The asset mix Jan. 1 was 46% stocks, 40% bonds and 14% cash.

The firm follows 300 stocks closely and 600, generally; 80% of the research is generated internally.

Clients include Sundstrand, International Paper, Eastman Kodak and Harris.

Richard A. Cantor, president, is chief investment officer; Robert R. McComsey, chief operating officer, is client contact-equity and balanced; Martin McKerrow, director of client services, is contact-fixed income.

## The New England

501 Boylston St., Boston, Mass. 02117; (617) 578-2000

| | |
|---|---|
| Total assets managed | $14,505,000,000 |
| Tax-exempt assets managed: | |
| Total | $5,306,000,000 |
| Pooled accounts | $237,000,000 |
| Separate accounts | $56,000,000 |
| GICs | $2,242,000,000 |
| Annuities | $78,000,000 |
| Other | $2,693,000,000 |
| Real estate assets managed | $5,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 402 |
| Types of accounts managed | CEGJ |
| No. of portfolio managers | 40 |
| Size of research staff | 80 |

The New England is an equity, fixed-income, balanced and real estate manager.

Its equity approach is characterized by sector rotation, search for companies with the greatest potential for earnings surge and a strong sell discipline. Usually, 20 to 30 issues are held.

Its fixed-income approach is based on interest rate anticipation and sector and credit analyses. Options and financial futures are used.

Its real estate investments are handled by its affiliate, Copley Real Estate Advisors, which is profiled elsewhere in this issue.

The separate account asset mix Jan. 1 was 63% stocks, 14% bonds, 13% cash, 0.5% equity real estate, 2% mortgages and 7.5% other.

Its clients include Union Pacific, Pillsbury, Coca-Cola and Virginia.

Ralph F. Verni, executive vice president-finance, is chief investment officer; Antwine Jefferson III, vice president, is client contact.

## New York Life Insurance Co.

51 Madison Ave., New York, N.Y. 10010; (212) 576-7416

| | |
|---|---|
| Total assets managed | $33,792,000,000 |
| Tax-exempt assets managed: | |
| Total | $12,400,000,000 |
| Pooled accounts | $313,000,000 |
| GICs | $8,145,000,000 |
| Annuities | $1,761,000,000 |
| Other | $4,241,000,000 |
| Real estate assets managed | $33,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 507 |
| Types of accounts managed | CGJ |
| No. of portfolio managers | 12 |

New York Life Insurance Co. is an equity, fixed-income, convertibles and money market manager.

It offers active and passive stock approaches. Its growth equity approach focuses on companies with earnings growth rates substantially above the S&P 500. Management of the value equity account searches for companies whose value is not reflected in the stock price. The indexed equity account tracks the S&P 500.

Its fixed-income approach combines partial market timing and an actively managed core to provide competitive returns that consistently exceed inflation. Buy/sell disciplines are heavily emphasized; sector analysis is used.

The separate account asset mix Jan. 1 was 41.8% stocks, 30.7% bonds, 11.5% cash, 3.8% equity real estate and 12.2% convertible securities.

Its clients include American Airlines, New York City Teachers, K mart and Du Pont.

William E. Kelter, executive vice president, is chief investment officer; Linda Livornese, assistant vice president, is client contact.

## Newbold's Asset Management

1500 Walnut St., Philadelphia, Pa. 19102; (215) 893-9167

| | |
|---|---|
| Total assets managed | $3,294,000,000 |
| Tax-exempt assets managed | $3,301,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 115 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 15 |

Newbold's Asset Management is an equity and balanced manager.

Its equity approach is value oriented, emphasizing low p/e. Its fixed-income approach is passive.

The asset mix Jan. 1 was 80% stocks and 20% cash.

The firm follows 20 to 35 stocks closely and 120, generally; 95% of the research is generated internally.

The parent company is W.H. Newbold's Son & Co. Inc.

Clients include Hallmark Cards, Texas Utilities and Illinois State Board.

Timothy M. Havens is the chief investment officer; Robert E. Clarke is the client contact.

## Newhard, Cook Advisory Services Inc.

720 S. Colorado Blvd. Suite 170, Denver, Colo. 80222; (303) 753-9400 or (800) 852-0066

| | |
|---|---|
| Total assets managed | $28,000,000 |
| Tax-exempt assets managed | $10,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 27 |
| Types of accounts managed | CF |
| No. of portfolio managers | 1 |
| Size of research staff | 2 |

Newhard, Cook Advisory Services Inc., an equity manager, uses a highly disciplined growth stock approach with heavy emphasis on computerized technical analysis and market timing.

The firm follows 80 stocks closely and 4,000, generally; all research is generated internally.

The parent company is Newhard, Cook & Co. Inc.

Howard J. Hebert, president, is the chief investment officer; Eric R. White, vice president, and Suzanne M. Hebert, account executive, are the client contacts.

### Newport Pacific Management

500 Sansome St., Suite 810, San Francisco, Calif. 94111; (415) 781-5801

| | |
|---|---|
| Total assets managed | $40,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $5,000,000 |
| No. of portfolio managers | 1 |

Newport Pacific Management is an equity, fixed-income, balanced and international manager.

Its equity approach combines growth and emerging growth stocks and market timing. It invests globally, specializing in small to midsize companies in the Pacific Basin.

Its fixed-income approach uses interest rate anticipation.

The parent company is Newport International Management Ltd.

John M. Mussey, president, is the chief investment officer and the client contact.

### Nicholas Co. Inc.

700 N. Water St., Milwaukee, Wis. 53202; (414) 272-4650

| | |
|---|---|
| Total assets managed | $1,800,000,000 |
| Tax-exempt assets managed | $310,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 29 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

Nicholas Co. Inc. is an equity and balanced manager.

It takes a growth and low p/e stock approach to equity investments, and a passive approach to fixed-income investments.

The firm follows 150 stocks closely and 300, generally; 50% of the research is generated internally.

Clients include Goodyear, Mayo Clinic, Vulcan Materials and The Common Fund.

Albert O. Nicholas is the chief investment officer; David L. Johnson is the client contact.

### Nicholas-Applegate Capital Management

701 B St. Suite 2040, San Diego, Calif. 92101; (619) 234-4472

| | |
|---|---|
| Total assets managed | $972,000,000 |
| Tax-exempt assets managed | $850,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 43 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 7 |

Nicholas-Applegate Capital Management is an equity and balanced manager.

The firm specializes in growth stock investments, using a bottom-up approach.

The asset mix Jan. 1 was 88% stocks, 1% bonds and 11% cash.

Research is derived by an external network supplemented by internally developed system controls.

Clients include Virginia Supplemental, The Common Fund, United Technologies and Pacific Lighting.

Arthur E. Nicholas, chairman, is chief investment officer; Fred C. Applegate, president, is client contact.

### Nikko & Associates Inc.

350 Park Ave., New York, N.Y. 10022; (212) 319-2730

| | |
|---|---|
| Total assets managed | $932,000,000 |
| Tax-exempt assets managed | $172,000,000 |
| International assets managed | $101,000,000 |
| Index funds managed | $71,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 5 |
| Types of accounts managed | CG |
| No. of portfolio managers | 45 |
| Size of research staff | 12 |

Nikko & Associates Inc. is an equity, fixed-income, balanced and international manager.

Its equity approach is top-down, offering active and indexed management for international and domestic portfolios. The fixed-income approach uses risk control as well as disciplined investment skills. A benchmark portfolio is determined, which can be used for measuring performance and risk of actual portfolios.

Stock index futures and fixed-income futures are used.

The parent company is Nikko International Capital Management Co. Ltd.

Stanley Kirtman, senior vice president, is the chief investment officer; David Rochman, vice president, is the client contact.

### NM Capital Management Inc.

7800 Marble N.E. Suite 8, Albuquerque, N.M. 87110; (505) 268-0072

| | |
|---|---|
| Total assets managed | $95,000,000 |
| Tax-exempt assets managed | $55,000,000 |
| Real estate assets managed | $3,000,000 |
| International assets managed | $3,000,000 |
| Dedicated funds managed | $7,000,000 |
| Minimum separate account | $200,000 |
| Tax-exempt clients | 77 |
| Types of accounts managed | CF |
| No. of portfolio managers | 3 |

NM Capital Management Inc., formerly New Mexico Capital Management, is an equity, fixed-income and balanced manager.

Its bottom-up equity approach emphasizes low p/e stocks and Graham & Dodd analysis.

Its fixed-income emphasis is on A or better coupon bonds, using interest rate anticipation and sector analysis.

Gerald S. Epstein is the chief investment officer; Charles H. Womack and Thomas S. Christopher, executive vice presidents, are the client contacts.

### Noddings Investment Group

2 Mid America Plaza, Suite 920, Oakbrook Terrace, Ill. 60181; (312) 954-1322

| | |
|---|---|
| Total assets managed | $70,000,000 |
| Tax-exempt assets managed | $44,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 66 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 4 |
| Size of research staff | 3 |

Noddings Investment Group Inc., formerly Noddings-Calamos Asset Management Inc., is a convertible securities manager.

Its approach is quantitative, identifying and capitalizing on inefficiencies through mathematical evaluation techniques. Options are used.

Thomas C. Noddings, president, is chief investment officer; Carol A. Sachs, executive vice president, is client contact.

### Nomura Capital Management

180 Maiden Lane, New York, N.Y. 10038; (212) 509-8181

| | |
|---|---|
| Total assets managed | $1,885,000,000 |
| Tax-exempt assets managed | $951,000,000 |
| International assets managed | $951,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 15 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 15 |
| Size of research staff | 149 |

Nomura Capital Management Inc., a global manager, takes an active equity approach using original fundamental and economic research. Stocks are chosen through disciplined valuation aided by quantitative tools.

Its fixed-income approach uses sector analysis and interest rate anticipation. Portfolios are tailored to individual client risk/return tolerance using a baseline portfolio approach.

The asset mix Jan. 1 was 90% stocks and 10% cash. As of the same date, the firm had $856 million in foreign stocks and $95 million in foreign cash.

The parent company is Nomura Investment Management Co. Ltd.

Clients include GE, GM, Hawaii and Southwestern Bell.

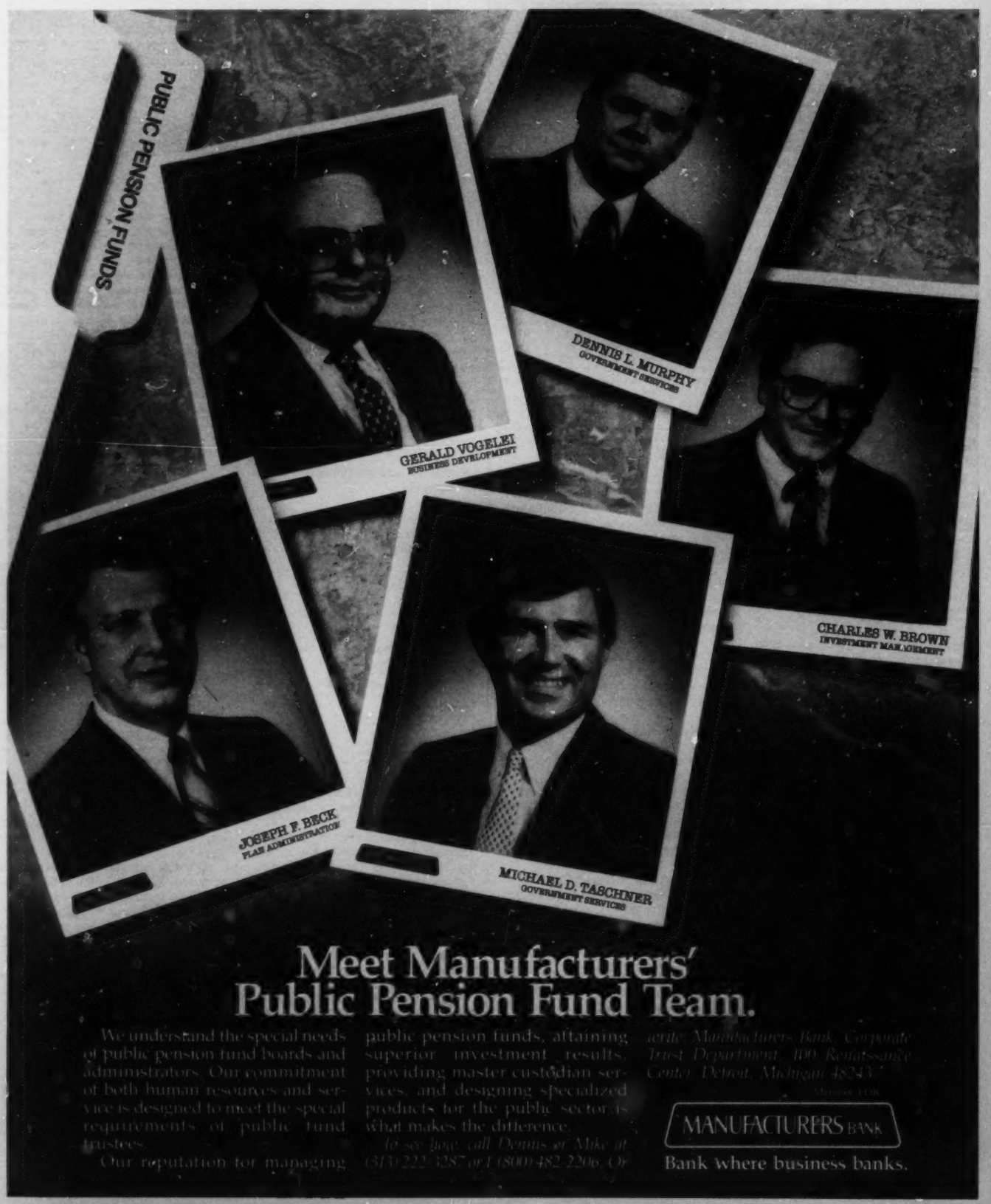
Takeo Nakamura, president, is the chief investment officer; Brian X. Fitzgibbon, senior vice president, is the client contact.

### Steven A. Norolan & Associates Inc.

100 Pine St. Suite 3350, San Francisco, Calif. 94111; (415) 398-8766

| | |
|---|---|
| Total assets managed | $51,000,000 |
| Tax-exempt assets managed | $32,000,000 |
| Minimum separate account | $240,000 |
| Tax-exempt clients | 45 |
| Types of accounts managed | CF |
| No. of portfolio managers | 4 |

Steven A. Norolan & Associates Inc. is an equity, fixed-income and ba-

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lanced manager.

Its equity approach analyzes growth stocks with Graham & Dodd and employs market timing.

Its fixed-income approach uses interest rate anticipation and sector analysis, emphasizing maturity structure and quality ratings.

Options and fixed-income futures are used.

Steven A. Noroian, chairman, is the chief investment officer; Duffy A. Morf, president, is the client contact.

## Norstar Investment Advisory Services

45 East Ave., Rochester, N.Y. 14604; (716) 423-1900

| | |
|---|---|
| Total assets managed | $1,649,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,649,000,000 |
| Commingled | $650,000,000 |
| Separate | $999,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients: | |
| Commingled | 21 |
| Separate | 229 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 11 |

Norstar Investment Advisory Services is an equity, fixed-income and balanced manager.

Its equity approach is to invest in quality companies whose stocks are temporarily out of favor. It looks for advantages, including above-average yield, low p/e, low price to cash flow and low price to book.

Its fixed-income approach seeks advantages within sectors and between maturity ranges. It invests in sinking fund bonds, depressed convertibles, upgrade credit candidates, extendible notes and floating-rate notes. It invests defensively.

The asset mix Jan. 1 was 50% stocks, 45% bonds and 5% cash.

Clients include Rochester Gas & Electric, Goulds Pumps, and Ithaca College and Albany Medical Center.

The parent company is Fleet/Norstar Financial.

James Knauf Jr., president and chief executive officer, is the chief investment officer; Marshall Raucci Jr., vice president-director of marketing, is the client contact.

## Norstar Trust Co.

45 East Ave., Rochester, N.Y. 14604; (716) 546-9085

| | |
|---|---|
| Total assets managed | $3,271,000,000 |
| Tax-exempt assets managed: | |
| Total | $995,000,000 |
| Commingled | $134,000,000 |
| Separate | $861,000,000 |
| Minimum separate account | $600,000 |
| Tax-exempt clients: | |
| Commingled | 1,513 |
| Separate | 1,001 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 21 |

Norstar Trust Co. is an equity, fixed-income and balanced manager.

Its equity approach emphasizes value, using Graham & Dodd analysis to invest in quality companies whose stocks are temporarily out of favor.

Its fixed-income approach uses interest rate anticipation and sector analysis to seek an advantage over inflation. It invests defensively, looking for advantaged securities within sectors.

The asset mix Jan. 1 was 50% stocks, 45% bonds and 5% cash.

The parent company is Fleet/Norstar Financial Group.

Bart J. Feiden is the chief investment officer; John C. Law, vice president and marketing officer, is the client contact.

## North American Capital Management

P.O. Box 6728, Shawnee Mission, Kan. 66206; (913) 381-8401

| | |
|---|---|
| Total assets managed | $10,000,000 |
| Tax-exempt assets managed | $3,000,000 |
| Minimum separate account | $80,000 |
| Tax-exempt clients | 31 |
| Types of accounts managed | CFJ |
| No. of portfolio managers | 1 |

North American Capital Management, an equity manager, invests in large-cap, blue-chip companies using market timing, technical analysis and some quantitative analysis to select investment-quality stocks. A similar procedure is used to determine the asset allocation. Portfolios are managed to be risk averse. Options are used for hedging.

Its fixed-income approach is based on interest rate anticipation.

Robert J. McElwain, president, is the chief investment officer; Mr. McElwain and Kay Malone are the client contacts.

## Northern Capital Management Inc.

2122 Luann Lane, Madison, Wis. 53713; (608) 274-9911

| | |
|---|---|
| Total assets managed | $1,248,000,000 |
| Tax-exempt assets managed | $1,162,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 61 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 5 |

Northern Capital Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach is to maximize capital appreciation within the context of preserving client assets by using market timing and stock selection.

Its fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 50% stocks, 33% bonds and 17% cash.

The firm follows 50 stocks closely and 100, generally; 70% of the research is generated internally.

The parent company is United Asset Management.

Richard M. Moskalik is the chief investment officer; Roland R. Reinholtz and Stephen L. Hawk are the client contacts.

## Northern Investment Management Co.

200 W. Madison St. Suite 2710, Chicago, Ill. 60606; (312) 407-6300

| | |
|---|---|
| Total assets managed | $5,955,000,000 |
| Tax-exempt assets managed: | |
| Total | $5,568,000,000 |
| Commingled | $1,254,000,000 |
| Separate | $4,314,000,000 |
| International assets managed | $2,000,000 |
| Indexed assets managed | $1,063,000,000 |
| Dedicated assets managed | $228,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients: | |
| Commingled | 68 |
| Separate | 92 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 13 |
| Size of research staff | 2 |

Northern Investment Management Co., the firm established after the merger of Northern Trust Co./Strategic Investment Services and The Griffin Group, is an equity, fixed-income and balanced manager.

Its equity approach focuses on strong growth companies, following internal or external changes of a company or industry to capitalize on adjustments to market valuations.

Its fixed-income approach is a controlled-risk style that quantifies investment objectives into a benchmark portfolio against which the firm manages. Individual issue arbitrage is employed.

The asset mix Jan. 1 was 39% stocks, 40% bonds and 21% cash; $2 million was in foreign stocks, $918 million in equity index funds and $145 million in bond index funds.

The parent is Northern Trust Corp.

Luke Mazur, managing director-equity, is chief investment manager; John Blunt, managing director-marketing and administration, is client contact.

## The Northern Trust Co.

50 S. LaSalle St., Chicago, Ill. 60675; (312) 630-6000

| | |
|---|---|
| Total assets managed | $20,500,000,000 |
| Tax-exempt assets managed: | |
| Total | $7,600,000,000 |
| Commingled | $7,600,000,000 |
| Minimum separate account | $100,000,000 |
| Tax-exempt clients | 323 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 5 |
| Size of research staff | 1 |

The Northern Trust Co. is a cash investment manager.

Options, stock index futures and fixed-income futures are used.

All assets were in money market and synthetic instruments Jan. 1.

William F. Bahl is the chief investment officer; Thomas W. Kimen Jr., senior vice president, is the client contact.

## NorthWest Quadrant Inc.

450 Newport Center Drive, Suite 420, Newport Beach, Calif. 92660; (714) 720-9232

| | |
|---|---|
| Total assets managed | $75,000,000 |
| Tax-exempt assets managed | $39,000,000 |
| Minimum separate account | $400,000 |
| Tax-exempt clients | 70 |
| Types of accounts managed | CF |
| No. of portfolio managers | 4 |
| Size of research staff | 1 |

NorthWest Quadrant Inc. offers equity, international, natural resources and bond substitution management.

The firm is a hedge equity manager using convertibles, covered options, long stock/long put and closed-end funds.

The firm follows 150 stocks closely and 700, generally; 90% of the research is generated internally.

Clients include United Engineering and American Rice Growers.

Roger W. Wilson, president, is the chief investment officer; Nancy Sweet, vice president/portfolio manager, is the client contact.

## Norwest Capital Management & Trust Co.

P.O. Box 597, Helena, Mont. 59624; (406) 443-4700

| | |
|---|---|
| Total assets managed | $504,000,000 |
| Tax-exempt assets managed: | |
| Total | $151,000,000 |
| Commingled | $44,000,000 |
| Separate | $107,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients: | |
| Commingled | 295 |
| Separate | 245 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 3 |

Norwest Capital Management & Trust Co. is an equity, fixed-income and balanced manager.

Its equity approach emphasizes demonstrated growth stocks bought at lower than historical norm valuations. Valuation criteria are based on historical and forward-looking factors.

Its fixed-income approach is passive; securities are used to gain a fixed rate of interest, to return principal on a specific date, and to control of portfolio volatility and risk.

The parent company is Norwest Corp.

David L. Roberts, vice president, is the chief investment officer and the client contact.

## Norwest Capital Resources

8th Street and Marquette Avenue, Minneapolis, Minn. 55479; (612) 372-4785

| | |
|---|---|
| Total assets managed | $2,070,000,000 |
| Tax-exempt assets managed: | |
| Total | $2,044,000,000 |
| Commingled | $667,000,000 |
| Separate | $1,377,000,000 |
| 401(k)/457 assets managed | $613,000,000 |
| 401(k)/457 clients | 85 |
| International assets managed | $12,000,000 |
| Indexed assets managed | $76,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 530 |
| Separate | 378 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 5 |
| Size of research staff | 6 |

Norwest Capital Resources Inc. is an equity, fixed-income, balanced, GIC and cash manager.

Its equity approach uses quantitative approaches with growth and emerging growth stocks. An active manager, it evaluates current trends and anticipated changes.

In fixed income, the core style uses laddering, investing equally in each year of a maturity schedule. Participation is emphasized over anticipation, and investing over speculation. Sector analysis is used.

Options, stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 45% stocks and 55% bonds; $12 million was in foreign stocks, $37 million in equity index funds and $39 million in bond index funds.

Clients include Northern States Power, Valspar and Bemis.

The parent is Norwest Corp.

Judy Mares, vice president and managing director, is chief investment officer; Dave Bodine, vice president, is client contact.

## NSR Asset Management

605 Third Ave., New York, N.Y. 10158; (212) 687-2200

| | |
|---|---|
| Total assets managed | $166,000,000 |
| Tax-exempt assets managed | $166,000,000 |
| Minimum separate account | $2,500,000 |
| Tax-exempt clients | 9 |
| Types of accounts managed | CE |
| No. of portfolio managers | 2 |

NSR Asset Management Corp. is an equity and balanced manager.

Its quantitative, low p/e equity approach uses Graham & Dodd analysis.

Its fixed-income approach uses sector analysis. Portfolio duration variation is modest - plus or minus 10% from the applicable index. There is an orientation toward yield.

The firm follows 100 stocks closely and 300, generally; 50% of the research is generated internally.

The parent company is National Securities & Research Corp.

Clients include Brooklyn Union Gas, National Intergroup and Gleason.

William R. Sadler is the chief investment officer and the client contact.

## NWQ Investment Management Co.

655 S. Hope St., 11th Floor, Los Angeles, Calif. 90017; (213) 624-6700

| | |
|---|---|
| Total assets managed | $1,146,000,000 |
| Tax-exempt assets managed | $962,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 189 |
| Types of accounts managed | CFJG |
| No. of portfolio managers | 6 |
| Size of research staff | 1 |

NWQ Investment Management Co. is an equity and balanced manager.

Its equity approach combines market timing with low p/e stocks and above-average yield. Fixed-income instruments are used as equity substitutes when it is believed the risk/reward relationships are attractive and a meaningful opportunity to earn a return well above the coupon rate exists. Interest rate anticipation is used.

The asset mix Jan. 1 was 35% stocks, 38% bonds and 27% cash.

The firm follows 150 stocks closely and 500 generally; 15% of the research is generated internally.

Clients include Directors Guild of America, Unisys, National Bulk Carrier and Motion Picture Industry Pension.

David A. Polak, managing director, is the chief investment officer; James P. Owen, managing director, is the client contact.

O

## Oakwood Counselors Inc.

888 Seventh Ave., New York, N.Y. 10106; (212) 757-6495

| | |
|---|---|
| Total assets managed | $54,000,000 |
| Tax-exempt assets managed | $14,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 20 |
| Types of accounts managed | CE |
| No. of portfolio managers | 3 |

Oakwood Counselors Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses conceptual investing. It invests in the beneficiaries of secular trends taking place.

Its fixed-income approach anticipates credit spreads and interest rate curves to achieve greatest possible return within risk parameters.

The firm follows 45 stocks closely and 60 generally.

Paul Sherman is the chief investment officer; Kenneth Mantel is the client contact.

## The O'Connor Group

200 Park Ave., New York, N.Y. 10166; (212) 687-7420

| | |
|---|---|
| Total assets managed | $1,200,000,000 |
| Tax-exempt assets managed | $930,000,000 |
| Real estate assets managed | $930,000,000 |
| Minimum separate account | $100,000,000 |
| Tax-exempt clients | 13 |
| Types of accounts managed | CEFG |
| Size of research staff | 4 |

The O'Connor Group, formerly J.W. O'Connor & Co. Inc., is a real estate manager that invests in large transactions with franchise characteristics, such as center city office buildings and regional shopping centers. The firm acts as investment manager for institutional clients on a separate account basis and through commingled funds, and maintains property management capabilities in-house.

All assets were committed to equity real estate Jan. 1. As of the same date, $703 million was actually invested.

Clients include New York State Common Fund, AT&T, Kansas Public Employees and Burlington Northern.

Jeremiah W. O'Connor Jr., president, is the chief investment officer; Nancy Lashire, vice president, is the client contact.

## Oechsle International Advisors

1 International Place, Boston, Mass. 02110; (617) 330-8817

| | |
|---|---|
| Total assets managed | $800,000,000 |
| Tax-exempt assets managed | $585,000,000 |
| International assets managed | $585,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 21 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 5 |
| Size of research staff | 3 |

Oechsle International Advisors is an international manager.

Its equity approach emphasizes bottom-up stock selection, aggressive top-down country allocation and value orientation. The investment horizon is 18 to 24 months; portfolios are constructed with a limited number of holdings; investments are managed in a minimum of eight and a maximum of 12 country markets.

All tax-exempt assets were invested in foreign stocks Jan. 1.

The firm follows 300 stocks closely and 100 generally; 90% of the research is generated internally.

Clients include US WEST, City and County of San Francisco, Harvard University and Stanford University.

Walter Oechsle, partner, is the chief investment officer; Stephen P. Langer, partner, is the client contact.

## O'Herron & Co. Inc.

1300 St. Mary's St., Suite 210, Raleigh, N.C. 27605; (919) 834-9224

| | |
|---|---|
| Total assets managed | $59,000,000 |
| Tax-exempt assets managed | $38,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 40 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 2 |

O'Herron & Co. Inc. is an equity, fixed-income and balanced manager.

Its equity approach is value oriented, focusing on investments with relatively low p/e ratios and strong balance sheets. Approximately 40% of equity investments are maintained in companies in North and South Carolina.

Its fixed-income approach uses convertible bonds primarily, plus government securities of five years or less maturity.

The parent company is Foundation Investment Group.

James J. Green, president, is the chief investment officer and the client contact.

## Michael B. O'Higgins & Co.

99 Pine St., Albany, N.Y. 12207; (518) 436-9731

| | |
|---|---|
| Total assets managed | $170,000,000 |
| Tax-exempt assets managed | $155,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 130 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

Michael B. O'Higgins & Co., an equity manager, uses sector rotation, combining low risk and high returns by using large-cap stocks. It compares stocks on a relative-strength basis to identify opportunities.

The firm follows 90 stocks; all research is generated internally.

Clients include Navistar, American Subcontractors and Camp Dudley YMCA Endowment.

Michael B. O'Higgins is chief inves

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ment officer; George B. Chelius III, partner-marketing, is client contact.

## The Ohio Co.

155 E. Broad St., Columbus, Ohio 43215; (614) 464-5548

| | |
|---|---|
| Total assets managed | $400,000,000 |
| Tax-exempt assets managed | $330,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 72 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 5 |
| Size of research staff | 6 |

The Ohio Co. is an equity, fixed-income and balanced manager.

Its equity approach buys stock with long-term track records of earnings and dividend growth, superior return-on-equity trends, priced at a 15% to 20% discount to the S&P 500 multiple.

Its fixed-income approach uses interest rate anticipation. Managers are defensive, buying only AAA rated, government or government-backed securities with average maturities of five to seven years.

The firm follows 60 stocks closely and 150 generally; 20% of the research is generated internally.

C.A. Peterson, senior executive vice president, is the chief investment officer; Sam J. Vogel, business development officer, is the client contact.

## Old Kent Bank and Trust Co.

1 Vanderberg Center, Grand Rapids, Mich. 49503; (616) 774-5248

| | |
|---|---|
| Total assets managed | $4,101,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,475,000,000 |
| Commingled | $829,000,000 |
| Separate | $646,000,000 |
| 401(k)/457 assets managed | $30,000,000 |
| 401(k)/457 clients | 25 |
| Real estate assets managed | $30,000,000 |
| Indexed assets managed | $90,000,000 |
| Dedicated assets managed | $10,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients: | |
| Commingled | 897 |
| Separate | 49 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 15 |
| Size of research staff | 5 |

Old Kent Bank and Trust Co. is an equity, fixed-income and balanced manager.

Its equity approach is passive; its core/non-core style uses value-oriented, quantitative screens to identify companies with accelerating earnings. Sector rotation is used.

Its fixed-income approach uses a quantitative model to assess probability of longer duration securities relative to shorter duration securities.

Stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 25% stocks, 65% bonds, 8% cash and 2% equity real estate. As of the same date, the firm had $90 million in equity index funds.

The parent company is Old Kent Financial Corp.

Joseph T. Keating, senior vice president, is chief investment officer; Philip M. Allen, senior vice president, is client contact.

## Olympic Capital Management Inc.

3008 Rainier Tower, Seattle, Wash. 98101; (206) 447-9399

| | |
|---|---|
| Total assets managed | $2,038,000,000 |
| Tax-exempt assets managed | $1,960,000,000 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients | 65 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 5 |

Olympic Capital Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses sector rotation and Graham & Dodd analysis.

Its fixed-income approach uses interest rate anticipation and sector analysis.

The asset mix Jan. 1 was 42% stocks, 42% bonds and 16% cash.

The firm follows 200 stocks closely and 1,000 generally; 20% of the research is generated internally.

The parent company is United Asset Management.

Clients include Boeing, Pacific Gas & Electric, United Methodist Church and Pacific Lighting.

John S. Crowl is the chief investment officer and the client contact.

## One Federal Asset Management

1 Federal St., Boston, Mass. 02211; (617) 292-3178

| | |
|---|---|
| Total assets managed | $1,754,000,000 |
| Tax-exempt assets managed | $1,150,000,000 |
| 401(k)/457 assets managed | $229,000,000 |
| 401(k)/457 clients | 2 |
| Dedicated funds managed | $13,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 22 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 12 |
| Size of research staff | 2 |

One Federal Asset Management is an equity, fixed-income and balanced manager.

Its equity approach uses a bottom-up, fundamental stock selection process.

Its fixed-income approach uses risk-controlled active bond management to establish a benchmark to meet client objectives. Portfolios are actively managed around the benchmark.

The asset mix Jan. 1 was 22% stocks, 36% bonds (including mortgage-backed securities) and 42% cash.

The firm follows 120 stocks closely and 600 generally; all research is generated internally.

The parent company is Shawmut National Corp.

Clients include Shawmut Employees, Liberty Mutual, Massachusetts Treasurer's Trust and Massachusetts PRIT.

Bradford J. Johnson, president, is the chief investment officer; Albert R. Vandam, vice president-director of marketing and client service, is the client contact.

## Oppenheimer Capital Corp.

Oppenheimer Tower, World Financial Center, New York, N.Y. 10281; (212) 667-7515

| | |
|---|---|
| Total assets managed | $12,201,000,000 |
| Tax-exempt assets managed | $11,914,000,000 |
| 401(k)/457 assets managed | $5,000,000 |
| 401(k)/457 clients | 2 |
| International assets managed | $81,000,000 |
| Dedicated funds managed | $130,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 310 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 19 |
| Size of research staff | 5 |

Oppenheimer Capital Corp. is an equity, fixed-income and balanced manager.

Its equity approach analyzes elements of value that include business segments, undedicated cash flow and hidden assets. Asset allocation is determined by analyzing financial liquidity and levels of market valuation.

Its fixed-income approach is to identify relative value as it applies to sectors of the bond market and maturity structure.

Options and fixed-income futures are used as separate products.

Portfolio insurance is offered to nine clients, covering $862 million in assets.

The asset mix Jan. 1 was 55% stocks, 11% bonds, 14% cash and 20% options and futures. As of the same date, the firm had $81 million in foreign stocks.

The parent company is Oppenheimer Financial Corp.

George A. Long, managing director, is the chief investment officer; Frank P.L. Minard, managing director, is the client contact.

## Oregon Bank

1001 S.W. Fifth Ave., P.O. Box 2808, Portland, Ore. 97208; (503) 796-3603

| | |
|---|---|
| Total assets managed | $136,000,000 |
| Tax-exempt assets managed: | |
| Total | $53,000,000 |
| Commingled | $19,000,000 |
| Separate | $34,000,000 |
| Real estate assets managed | $500,000 |
| International assets managed | $200,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients: | |
| Commingled | 84 |
| Separate | 9 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 3 |

Oregon Bank is an equity, fixed-income and balanced manager.

Its equity approach stresses undervalued equities with low p/es. Its fixed-income approach emphasizes consistency of return and principal stability.

The parent company is Security Pacific Corp.

Robert T. Platt III, senior vice president, is the chief investment officer; Dennis M. Munsey, vice president, is the client contact.

P

## Pacific Century Advisers Inc.

1200 Third Ave. Suite 1800, San Diego, Calif. 92101; (619) 544-1252

| | |
|---|---|
| Total assets managed | $8,085,000,000 |
| Tax-exempt assets managed | $1,672,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 97 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 9 |
| Size of research staff | 2 |

Pacific Century Advisers Inc. is an equity, fixed-income, balanced, GIC and convertible securities manager.

Its equity approach is driven by a stock selection process that focuses on companies demonstrating positive rates of change in earnings, price and industry-relative strength. This approach is supplemented by a top-down overlay looking at economic rates of change and sector-relative strength.

Its fixed-income approach uses interest rate anticipation and sector analysis. The firm uses several techniques, including laddering of maturities, variable barbelling and diversification by maturity, quality and industry.

Options, stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 48% stocks, 26% bonds and 26% cash.

The firm follows 2,000 stocks generally; 50% of research is generated internally.

The parent company is Security Pacific National Bank.

Clients include Olin, Dallas Police & Fire and California Community Foundation.

Joel Swanson, president, is the chief investment officer; Clark Gates, managing director, is the client contact.

## Pacific Financial Cos.

700 Newport Center Drive, Newport Beach, Calif. 92660; (714) 640-3030

| | |
|---|---|
| Total assets managed | $8,981,000,000 |
| Tax-exempt assets managed: | |
| Total | $4,496,000,000 |
| Pooled accounts | $339,000,000 |
| Separate accounts | $100,000,000 |
| GICs | $2,030,000,000 |
| Annuities | $700,000,000 |
| Other | $1,327,000,000 |
| Real estate assets managed | $46,000,000 |
| International assets managed | $11,000,000 |
| Indexed assets managed | $57,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 229 |
| Types of accounts managed | CFGJ |
| No. of portfolio managers | 25 |
| Size of research staff | 4 |

Pacific Financial Cos. is an equity, fixed-income, balanced, real estate, international and GIC manager.

Its equity approach offers a selection of active and passive styles to provide clients with options suitable for a broad spectrum of investment needs.

Its fixed-income capabilities cover a range of active strategies, and include a guaranteed indexed product. Options and financial futures are used.

Its real estate approach emphasizes midsize properties, diversified by type and location.

The separate account asset mix Jan. 1 was 27% stocks, 25% bonds, 37% cash and 11% mortgage-backed securities.

The parent company is Pacific Mutual Life Insurance Co.

William Cvengros, executive vice president, is chief investment officer; Robert E. Southard, managing director of Pacific Financial Advisors, is client contact.

## Pacific Financial Research

9601 Wilshire Blvd. Suite 828, Beverly Hills, Calif. 90210; (213) 278-4461

| | |
|---|---|
| Total assets managed | $1,705,000,000 |
| Tax-exempt assets managed | $1,466,000,000 |
| International assets managed | $21,000,000 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 57 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 4 |
| Size of research staff | 4 |

Pacific Financial Research is an equity, fixed-income, balanced and South Africa-free manager.

Its equity approach is value-oriented and contrarian, using Graham & Dodd analysis and low p/e securities.

Its fixed-income approach views bonds as equity substitutes and buys when bonds are cheaper than stocks. Portfolios are structured to capture value between stocks and bonds.

The asset mix Jan. 1 was 79% stocks, 15% bonds and 6% cash. As of the same date, the firm had $13.3 million in foreign stocks and $8 million in foreign bonds.

The firm follows 800 stocks closely and 2,000, generally; 95% of research is generated internally.

Clients include Litton, FMC, Lockheed and Vassar College.

James H. Gipson, president, is the chief investment officer and client contact.

## Pacific Investment Management Co.

840 Newport Center Drive, Suite 360, Newport Beach, Calif. 92660; (714) 640-3031

| | |
|---|---|
| Total assets managed | $15,176,000,000 |
| Tax-exempt assets managed | $15,133,000,000 |
| Real estate assets managed | $3,329,000,000 |
| International assets managed | $121,000,000 |
| Index funds managed | $130,000,000 |
| Minimum separate account | $40,000,000 |
| Tax-exempt clients | 93 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 8 |

Pacific Investment Management Co. is an equity, fixed-income, balanced and international manager.

Its equity approach is contrarian,

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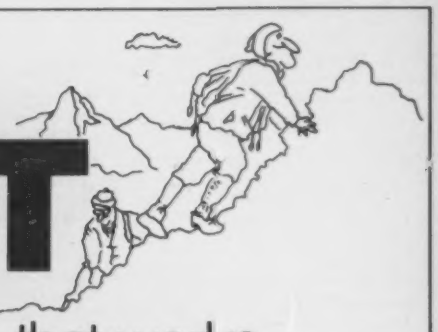

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using quantitative techniques and large-cap growth stocks. Through its valuation methodology, it focuses on seasoned, high-quality companies with consistent above-average earnings growth.

Its fixed-income approach is active; the firm seeks value across all sectors. Quantitative tools are used to find inefficiencies in futures and options (fixed and equity). Major swings in duration are avoided. Options and financial futures are used.

The asset mix Jan. 1 was 2% stocks, 58% bonds, 18% cash and 22% mortgage-backed securities; $114 million was in foreign bonds, $7 million in foreign cash and $130 million in equity index funds.

The parent is Pacific Financial Cos.

Clients include RJR Nabisco, Chevron, AT&T and American Express.

James F. Muzzy, managing director, is client contact.

### Palley-Needelman Asset Management Inc.

1501 Quail St. Suite 110, Newport Beach, Calif. 92660; (714) 752-2233

| | |
|---|---|
| Total assets managed | $225,000,000 |
| Tax-exempt assets managed | $180,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 57 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 3 |
| Size of research staff | 1 |

Palley-Needelman Asset Management Inc. is an equity and balanced manager.

Its equity approach is to purchase low p/e, high-yield, low-beta, strong balance sheet issues with positive free cash flow and stable industry characteristics. It uses bottom-up security selection and top-down asset allocation.

In fixed income, it is a duration specialist, using short to intermediate government and high-grade corporate securities.

Roger B. Palley is chief investment officer; Steven M. Borowski, director of marketing, is client contact.

### Palm Beach Capital Management Ltd.

205 Royal Palm Way, Palm Beach, Fla. 33480; (305) 820-1263

| | |
|---|---|
| Total assets managed | $284,000,000 |
| Tax-exempt assets managed | $5,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 5 |
| Types of accounts managed | CF |
| No. of portfolio managers | 6 |

Palm Beach Capital Management Ltd. is an equity, fixed-income and balanced manager.

Its equity approach uses Graham & Dodd and quantitative analysis, focusing on low p/e stocks. Its multifactor model screens 1,000 companies; those in the top quintile undergo fundamental review. Options are used. Its fixed-income approach uses interest rate anticipation, focusing on undervalued sectors.

The firm follows 200 stocks closely and 1,000, generally.

Thomas Keresey is chief investment officer; Floyd L. Wideman Jr. is client contact.

### Parametric Portfolio Associates Inc.

701 Fifth Ave., Suite 7310, Seattle, Wash. 98104; (206) 386-5575

| | |
|---|---|
| Total assets managed | $300,000,000 |
| Tax-exempt assets managed | $300,000,000 |
| International assets managed | $7,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | C |
| No. of portfolio managers | 4 |

Parametric Portfolio Associates Inc., and equity and international manager, uses quantitatively derived active tilts to provide a superior pattern of returns relative to a client's benchmark.

The parent company is Pacific Financial Asset Management.

Mark England-Markun, managing director, is chief investment officer; Bill Cornelius, managing director, is client contact.

**Key to abbreviations**

C: Corporate account
E: Educational endowments
F: Private foundations
G: U.S. state and local gov'ts
J: Jointly trusteed
P: Canadian provincial gov'ts
U: Unions (Canadian firms only)

### Parker Dillon Carlson & Johnson Inc.

120 W. Third St., Suite 300, Dayton, Ohio 45402; (513) 223-0600

| | |
|---|---|
| Total assets managed | $31,000,000 |
| Tax-exempt assets managed | $24,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 58 |
| Types of accounts managed | CF |
| No. of portfolio managers | 3 |

Parker Dillon Carlson & Johnson Inc. is an equity, fixed-income and balanced manager.

Its equity approach maintains a carefully diversified portfolio of small to midsize companies using a disciplined relative valuation process for buy/sell decisions. Its fixed-income approach is passive, maintsining a diversified portfolio of U.S. government securities with an average maturity of three years.

Leslie O. Parker III, president, is chief investment officer; Gayle Rominger, vice president, is client contact.

### Alan Patricof Associates Inc.

545 Madison Ave., New York, N.Y. 10022; (212) 753-6300

| | |
|---|---|
| Total assets managed | $166,000,000 |
| Tax-exempt assets managed | $160,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 24 |
| Types of accounts managed | CG |

Alan Patricof Associates Inc., a venture capital manager, that searches for emerging growth and venture capital investments.

### PCM International

745 Broad St., Newark, N.J. 07101; (201) 877-4559

| | |
|---|---|
| Total assets managed | $3,843,000,000 |
| Tax-exempt assets managed | $864,000,000 |
| International assets managed | $864,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 47 |
| Types of accounts managed | CG |
| No. of portfolio managers | 9 |
| Size of research staff | 2 |

PCM International is an international equity, fixed-income and global yield manager.

Its equity approach identifies the best earnings prospects relative to current price and avoids stocks exposed to bear markets globally. Market timing is used.

Its fixed-income approach uses active currency and maturity management. It owns government-quality securities in markets that are fundamentally sound.

Options and fixed-income futures are used.

The asset mix Jan. 1 was 30% stocks and 70% bonds.

The parent company is Prudential Insurance Co. of America.

Clients include Hawaii Employees, Army & Air Force Exchange Service and United Technologies.

Barry Gilliman, chief executive officer, is chief investment officer; J. Eric Nelson, director, is client contact.

### The Peckham Boston Co.

4 Longfellow Place, Suite 3305, Boston, Mass. 02114; (617) 523-4440

| | |
|---|---|
| Total assets managed | $23,000,000 |
| Tax-exempt assets managed | $23,000,000 |
| Real estate assets managed | $23,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 4 |
| Types of accounts managed | C |

The Peckham Boston Co., a real estate assets manager, emphasizes properties net leased to strong national companies. Parameters include guaranteed fixed income combined with upside potential.

John M. Peckham III is the chief investment officer; R. Beeman, of Boston Financial, is client contact.

### Pembroke Management Ltd.

1018 Sun Life Building, 1155 Metcalfe St., Montreal, Quebec H3B 2W8; (514) 866-2724

| | |
|---|---|
| Total assets managed | $380,000,000 |
| Tax-exempt assets managed: | |
| Total | $100,000,000 |
| For subsidiaries of U.S. firms | $30,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 3 |
| U.S. subsidiaries | 1 |
| Types of accounts managed | C |
| No. of portfolio managers | 5 |

Pembroke Management Ltd., a Canadian firm, is an equity manager that concentrates its investments in growth and emerging growth stocks.

It follows 75 stocks closely and 100 generally; 33% of research is generated internally.

Neil B. Ivory, president, is chief investment officer and client contact.

### Penn Mutual Life Insurance

Independence Square, Philadelphia, Pa. 19172; (215) 625-5000

| | |
|---|---|
| Total assets managed | $4,900,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,808,000,000 |
| Pooled accounts | $64,000,000 |
| GICs | $344,000,000 |
| Annuities | $428,000,000 |
| Other | $774,000,000 |
| Tax-exempt clients | 1,143 |
| Types of accounts managed | CGJ |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

Penn Mutual Life Insurance Co. is an equity and balanced manager.

Its equity approach is to invest in growth stocks.

Its fixed-income approach uses capital markets analysis to determine interest rate direction; sector analysis is used to find relative value.

The separate account asset mix Jan. 1 was 40% stocks and 60% in money markets.

The insurer follows 80 stocks closely and 120, generally; 25% of research is generated internally.

William V. Ferdinand is chief investment officer; Borden Ayers, vice president-brokerage and pension sales, is client contact.

### Penreal Advisors Ltd.

600-1100 Melville St., Vancouver, British Columbia V6E 4A6; (604) 685-8351

| | |
|---|---|
| Total assets managed | $186,000,000 |
| Tax-exempt assets managed: | |
| Total | $186,000,000 |
| For subsidiaries of U.S. firms | $26,000,000 |
| Tax-exempt clients | 57 |
| U.S. subsidiaries | 17 |
| Types of accounts managed | CU |
| No. of portfolio managers | 9 |
| Size of research staff | 3 |

Penreal Advisors Ltd., a Canadian real estate adviser, focuses on the acquisition of income-producing properties and land in major Canadian cities where income and value can be enhanced by property development, improvement, expansion and internal management.

Walter R. Badun, president, is chief investment officer; Garth D. Carefoot, vice president, is client contact.

### Pension Management Co.

541 Post Oak Tower, Houston, Texas 77056; (713) 552-1880

| | |
|---|---|
| Total assets managed | $40,000,000 |
| Tax-exempt assets managed | $35,000,000 |
| Tax-exempt clients | 50 |
| Types of accounts managed | CG |
| No. of portfolio managers | 1 |
| Size of research staff | 3 |

Pension Management Co. is an equity, fixed-income, balanced, hedged fund and gold stock manager.

Its equity approach uses sector rotation and market timing with growth and low p/e stocks. Its fixed-income approach uses sector analysis.

The firm follows 20 stocks closely and 20, generally; 95% of research is generated internally.

John Lee is the chief investment officer and client contact.

### Peregrine Capital Management Inc.

512 Nicollet Mall, Suite 830, Minneapolis, Minn. 55402-1099; (612) 372-9088

| | |
|---|---|
| Total assets managed | $1,480,000,000 |
| Tax-exempt assets managed | $1,047,000,000 |

**5 largest managers ranked by GIC assets**

| Firm | $ millions |
|---|---|
| Prudential Asset | 14,916 |
| Equitable Life | 14,327 |
| Metropolitan Life | 14,015 |
| Aetna Life | 12,358 |
| Travelers | 9,056 |
| John Hancock Financial | 6,844 |
| New York Life | 6,145 |
| The Principal | 4,175 |
| Providence Mut'l | 4,139 |
| Mass Mutual Life | 2,898 |
| Mutual Benefit Life | 2,557 |
| Connecticut Mutual Life | 2,322 |
| The New England | 2,241 |
| Continental Assurance | 2,213 |
| Pacific Financial Cos. | 2,090 |
| MONY Financial | 1,700 |
| State Mutual | 1,600 |
| Crown Life | 1,580 |
| CIGNA Asset | 1,386 |
| Great-West Life | 1,364 |
| UNUM Life | 1,226 |
| Hartford Life | 1,089 |
| Allstate Life | 894 |
| The Phoenix | 875 |
| Southwestern Life | 773 |
| Total | 112,720 |

| | |
|---|---|
| 401(k)/457 assets managed | $105,000,000 |
| 401(k)/457 clients | 5 |
| International assets managed | $12,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 15 |
| Types of accounts managed | CEG |
| No. of portfolio managers | 7 |

Peregrine Capital Management Inc. is an equity and fixed-income manager.

Its equity approach uses an aggressive, emerging-growth style seeking information gaps in small companies with potential for price appreciation. Its growth style seeks high-quality stocks.

Its fixed-income approach is interest rate-driven, employing sector analysis and using non-traditional securities. It uses below-market durations to control volatility and emphasizes high credit-quality issues to provide safety while searching for innovative features to enhance returns.

The asset mix Jan. 1 was 59% stocks, 17% bonds, 10% cash and 14% other. As of the same date, $12 million was in foreign stocks.

The parent company is Norwest Corp.

Clients include Methodist Hospital of Indiana, Olin and Hasbro.

Robert B. Mersky is the chief investment officer; Ann Frenzen is client contact.

### Perkins Capital Management

919 Twelve Oaks Center, 15500 Wayzata Blvd., Wayzata, Minn. 55391; (612) 473-8367

| | |
|---|---|
| Total assets managed | $30,000,000 |
| Tax-exempt assets managed | $12,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 15 |
| Types of accounts managed | CF |
| No. of portfolio managers | 1 |
| Size of research staff | 2 |

Perkins Capital Management Inc. is an equity and balanced manager.

Its equity approach emphasizes market timing and stock selection. It seeks unrecognized, transitional companies for underlying higher earnings and higher p/e ratios.

Its fixed-income approach seeks maximum income consistent with perceived quality rating with interest rate anticipation.

Richard W. Perkins, president, is chief investment officer. Harry A. Lindberg Jr., marketing director, is client contact.

### Peters, Gamm & West Inc.

8100 E. 22nd St., Building 800, Wichita, Kan. 67226; (316) 685-4149

| | |
|---|---|
| Total assets managed | $1,030,000,000 |
| Tax-exempt assets managed | $621,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 13 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 4 |

Peters, Gamm & West Inc. is a top-down fixed-income manager that uses economic analysis and projection to anticipate interest rate moves. Fixed-income futures are used.

The asset mix Jan. 1 was 96% bonds and 4% cash.

Clients include Kansas Public Employees, Wisconsin Public Service and MDU Resources.

Don S. Peters is chief investment officer; Marc A. Vincent, senior portfolio manager, is the client contact.

### Petersen, Flynn & Dinsmore

1208 One Market Plaza, San Francisco, Calif. 94105; (415) 777-0344

| | |
|---|---|
| Total assets managed | $350,000,000 |
| Tax-exempt assets managed | $300,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 16 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

Petersen, Flynn & Dinsmore is an equity, fixed-income and balanced manager.

Its equity approach emphasizes growth and low p/e stocks. Its fixed-income approach is driven by interest rate anticipation.

The firm follows 50 stocks closely and 1,500, generally; 25% of research is generated internally.

Clients include Fresno County and Scripps College.

Don Dinsmore, president, is chief investment officer; Larry Petersen is client contact.

### Petroleum & Resources

7 St. Paul St., Baltimore, Md. 21202; (301) 752-5900

| | |
|---|---|
| Total assets managed | $264,000,000 |
| Tax-exempt assets managed | $1,000,000 |
| Minimum separate account | $5,000,000 |
| Types of accounts managed | C |
| No. of portfolio managers | 4 |
| Size of research staff | 6 |

Petroleum & Resources Corp., an energy and natural resources equity manager, identifies undervalued stocks by concentrating on microfactors affecting segments of energy and resources industries and macro supply-demand and exogenous factors.

The firm follows 250 stocks closely and 500, generally; all research is generated internally.

It is affiliated with Adams Express, which owns 10% of the company.

W.D. MacCallan, chairman and chief executive officer, is chief investment officer; Monica C. Loh, vice president-investment advisory services, is client contact.

### Philadelphia Investment Management Group

1616 Walnut St. Suite 2011, Philadelphia, Pa. 19103; (215) 545-0079

| | |
|---|---|
| Total assets managed | $85,000,000 |
| Tax-exempt assets managed | $55,000,000 |
| International assets managed | $8,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 12 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 5 |
| Size of research staff | 6 |

Philadelphia Investment Management Group is an equity, fixed-income and balanced manager.

Its quantitative equity approach purchases stocks with low institutional ownership and traditional income statement, balance sheet and funds flow ratios.

Its fixed-income approach is passive with a bias toward intermediate maturities.

Alexander Parkhurst is the chief investment officer; Mr. Parkhurst, Edward Bowman and William H. Shettle, president, are client contacts.

### Phillips, Hager & North Ltd.

1700 - 1055 W. Hastings St., Vancouver, British Columbia V6E 2H3; (604) 684-4361

| | |
|---|---|
| Total assets managed | $2,294,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,979,000,000 |
| For subsidiaries of U.S. firms | $125,000,000 |
| Real estate assets managed | $94,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 71 |
| U.S. subsidiaries | 6 |
| Types of accounts managed | CEFU |
| No. of portfolio managers | 7 |
| Size of research staff | 5 |

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PROFILES

Phillips, Hager & North Ltd., a Canadian firm, is an equity, fixed-income and balanced manager.

Its equity approach emphasizes growth stocks, with representation of commodity and basic-industry stocks determined by economic forecasts. A combination of technical and value analysis is used for market timing.

Its fixed-income approach emphasizes interest rate anticipation and sector analysis to seek opportunities within a maturity structure set by expected interest rates and the shape of the yield curve.

The asset mix Jan. 1 was 44% Canadian stocks, 10% U.S. stocks, 38% bonds, 5% cash and 3% mortgages.

It follows 200 stocks closely and 500 generally; all research is generated internally.

Clients include Unisys, Ford, Suncor and Champion.

R.F. Bradshaw, president, is chief investment officer and client contact.

### The Phoenix

1 American Row, Hartford, Conn. 06115; (203) 275-5000

| | |
|---|---|
| Total assets managed | $7,000,000,000 |
| Tax-exempt assets managed: | |
| Total | $2,355,000,000 |
| Pooled accounts | $429,000,000 |
| Separate accounts | $220,000,000 |
| GICs | $875,000,000 |
| Other | $831,000,000 |
| 401(k)/457 assets managed | $115,000,000 |
| 401(k)/457 clients | 97 |
| Real estate assets managed | $234,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 1,156 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 11 |
| Size of research staff | 4 |

The Phoenix is an equity, fixed-income, balanced, real estate and GIC manager.

Its equity approach seeks appreciation through value and attempting to own industries where growth is anticipated. Loss avoidance is emphasized. In fixed income, interest rate anticipation and sector analysis are used. Options and financial futures are used.

In real estate, it makes participating investments in developmental and existing properties in suburban markets, acquiring them at below-market prices and diversifying by geography and property type.

The separate account asset mix Jan. 1 was 46% stocks, 5% bonds, 13% cash and 36% real estate.

Clients include Armtek, Goya Foods and Mark IV Industries.

Phillip R. Reynolds, executive vice president, is chief investment officer; H. Russell Irving, vice president-pension marketing and sales, is client contact.

### Piedmont Capital Management Associates

300 WatersEdge, Hilton Head, S.C. 29928; (803) 785-3330

| | |
|---|---|
| Total assets managed | $320,000,000 |
| Tax-exempt assets managed | $16,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 6 |
| Types of accounts managed | CJ |
| No. of portfolio managers | 3 |

Piedmont Capital Management Associates Inc. is a fixed-income and balanced manager.

Its fixed-income approach is to maximize total return subject to specified risk guidelines. Evaluation is determined by seasonal, cyclical and secular interest rates. Maturity and sector distribution are emphasized.

Clients include Carolina Virginia Meatcutters, UFCW Local Assistance Fund and UFCW of the Carolina Health Benefit Fund.

Walter M. Campbell, president, is chief investment officer; Margot McCord is client contact.

### Piedmont Realty Advisors

650 California St., 22nd Floor, San Francisco, Calif. 94108; (415) 433-4100

| | |
|---|---|
| Total assets managed | $1,250,000,000 |
| Tax-exempt assets managed | $130,000,000 |
| Real estate assets managed | $130,000,000 |
| Minimum separate account | $50,000,000 |
| Tax-exempt clients | 6 |
| Types of accounts managed | JG |
| No. of portfolio managers | 10 |
| Size of research staff | 1 |

Piedmont Realty Advisors, a real estate manager, acquires and manages investments in office buildings, apartments, retail, industrial, hotels and land nationwide. The firm's primary investment structures are equity joint ventures and participating debt with nationally recognized developers.

Robert H. Zerbst, president, is chief investment officer and client contact.

### Pierson Capital Management

Public Ledger Building, Independence Square, Philadelphia, Pa. 19106; (215) 625-0188

| | |
|---|---|
| Total assets managed | $82,000,000 |
| Tax-exempt assets managed | $8,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 15 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 3 |

Pierson Capital Management Inc. is an equity, balanced and international manager.

Its equity approach is bottom up, focusing on low p/e and growth stocks. It seeks small to midsize companies with strong balance sheets, well-defined market niches and strong management. In fixed-income, it uses convertibles and maturity-constrained government obligations.

The parent company is Pierson, Heidring & Pierson.

Daniel E. Devine, executive vice president, is the chief investment officer; Mark C. Hanna, executive vice president is the client contact.

### Pilgrim Baxter Greig & Associates

1255 Drummers Lane, Wayne, Pa. 15087; (215) 341-9000

| | |
|---|---|
| Total assets managed | $979,000,000 |
| Tax-exempt assets managed | $979,000,000 |
| Tax-exempt clients | 16 |
| Types of accounts managed | CG |
| No. of portfolio managers | 1 |
| Size of research staff | 5 |

Pilgrim Baxter Greig & Associates is an equity and mutual fund manager that focuses on growth stocks.

The asset mix Jan. 1 was 85% stocks and 15% cash.

The firm follows 400 stocks closely and 400, generally; all research is generated internally.

Clients include Pennsylvania State Employes, California State Teachers and Rockwell International.

Gary L. Pilgrim is chief investment officer; Harold J. Baxter is client contact.

### PIMS Investment Management Services

P.O. Box 281 Bates Drive, Pickerington, Ohio 43147; (614) 864-7100

| | |
|---|---|
| Total assets managed | $390,000,000 |
| Tax-exempt assets managed | $24,000,000 |
| Real estate assets managed | $6,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 40 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

PIMS Investment Management Services is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented, focusing on stocks that are undervalued relative to selected financial and earnings momentum criteria.

Fixed-income decisions is based on interest rate anticipation and the risk/reward relationships between market sectors as evidenced by the yield spread over comparable Treasuries.

The parent company is Physicians Insurance Co. of Ohio.

William G. Henderly, president, is chief investment officer; James H. Ritter, vice president, is client contact.

### Pittsburgh National Bank

1 Oliver Plaza, 27th Floor, Pittsburgh, Pa. 15265; (412) 762-3773

| | |
|---|---|
| Total assets managed | $6,300,000,000 |
| Tax-exempt assets managed: | |
| Total | $3,876,000,000 |
| Commingled | $742,000,000 |
| Separate | $3,134,000,000 |
| 401(k)/457 assets managed | $179,000,000 |
| 401(k)/457 clients | 54 |
| Real estate assets managed | $134,000,000 |
| International assets managed | $53,000,000 |


# STOCK INDEX TRADERS:

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- ☐ NYSE Composite Index and Futures Price History Diskette (Daily performance from 5/6/82 - end of last full month. Lotus 1-2-3 compatible. Please enclose $25 per diskette.)
- ☐ NYFE Customer Margin Requirements for Options
- ☐ Options on the NYSE Stock Index Futures

Name _____
Title _____
Company _____
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| | |
|---|---|
| Dedicated assets managed | $342,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 1,314 |
| Separate | 253 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 6 |
| Size of research staff | 18 |

Pittsburgh National Bank is an equity, fixed-income, balanced, global/international and equity hedging futures strategies manager.

Its equity approach is multifaceted. Portfolio policy is oriented toward market timing, stressing sector allocation. Stock selection emphasizes a value approach seeking stocks with low, absolute and/or relative multiples. An international portfolio stressing a low p/e strategy is available. Options and stock index futures are used.

Its fixed-income approach is based on interest rate anticipation and sector yield spread analysis. The bank also offers an active bond trading strategy that participates in major market trends and offers downside protection.

The asset mix Jan. 1 was 46% stocks, 43% bonds, 7% cash, 1% mortgages and 3% mortgage-backed securities; $16 million was in foreign stocks and $37 million in foreign cash.

Clients include Western Pennsylvania Teamsters and Aristech Chemical.

The parent is PNC Financial Corp.

John A. Martin, vice president, is chief investment officer; Don Kendrick is client contact.

## Platner & Associates

Chamber of Commerce Building, 462 Walnut St., Allentown, Pa. 18102; (215) 821-0160

| | |
|---|---|
| Total assets managed | $24,000,000 |
| Tax-exempt assets managed | $4,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 9 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

Platner & Associates is an equity, fixed-income and balanced manager.

Its equity approach uses emerging growth and growth stocks, and sector rotation. Fundamental analysis underscores stock selection, with an emphasis on asset allocation by sector as market conditions and attitudes change. Options are used.

Its fixed-income approach uses interest rate anticipation, emphasizing high-quality and diversified securities with intermediate maturities.

Robert F. Platner is the chief investment officer and the client contact.

## PM Portfolio Management

Friedrichstrasse 9, 8000 Munich 40, West Germany D-8000; (89) 33-20-36

| | |
|---|---|
| Total assets managed | $143,000,000 |
| Tax-exempt assets managed | $97,000,000 |
| International assets managed | $97,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 1 |
| Types of accounts managed | C |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

PM Portfolio Management GmbH is an equity, balanced and international manager.

Its equity approach uses emerging growth and growth stocks, and market timing. The firm offers three portfolio services: The Europlan equity fund, using stocks, dividend-right certificates, warrants and convertible bonds; the European balanced fund, using stocks, bonds and money market instruments; and the European small company fund, using securities of small-cap companies.

Walter Kames, board director, is chief investment officer; Friedhelm Pott, director, and Ulrich R. Kuettner, fund manager, are client contacts.

## PMRealty Advisors Inc.

800 Newport Center Drive, Suite 300, Newport Beach, Calif. 92660; (714) 721-5000

| | |
|---|---|
| Total assets managed | $480,000,000 |
| Tax-exempt assets managed | $220,000,000 |
| Real estate assets managed | $178,000,000 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients | 19 |
| Types of accounts managed | CJG |
| No. of portfolio managers | 5 |
| Size of research staff | 5 |

PMRealty Advisors Inc., a real estate manager, concentrates on income-producing retail and multitenant industrial properties in high-growth corridors of major metropolitan areas.

Of the $220 million in assets, $178 million was in invested in equity real estate. The remainder is committed, but not yet received.

The parent company is Pacific Mutual Life Insurance Co.

Its clients include Nevada Public Employees and Hewlett Packard.

James G. McWalters is managing director; Peter Hammer, managing director, is client contact.

## Portfolio Capital Management Inc.

2 Fairview Plaza, Suite 610, 5950 Fairview Road, Charlotte, N.C. 28210; (704) 552-0073

| | |
|---|---|
| Total assets managed | $66,000,000 |
| Tax-exempt assets managed | $33,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 21 |
| Types of accounts managed | CEJ |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Portfolio Capital Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach focuses on stocks with below-average p/e ratios and with favorable earnings momentum. It uses Graham & Dodd analysis.

Its fixed-income approach is passive. Staggered maturities are used, with a weighted average maturity of two to five years depending on its interest rate forecast.

R. Hatten Hodges Jr., chairman, is chief investment officer and client contact.

## Portfolio Timing Inc.

402 Rainier Bank Building, 11th & Broadway, Tacoma, Wash. 98402; (206) 383-1676

| | |
|---|---|
| Total assets managed | $20,000,000 |
| Tax-exempt assets managed | $15,000,000 |
| Minimum separate account | $35,000 |
| Tax-exempt clients | 166 |
| Types of accounts managed | CF |
| No. of portfolio managers | 1 |

Portfolio Timing Inc. is an equity, fixed-income and balanced manager.

Its equity approach is a 100% movement of assets between no-load equity mutual funds and money market funds using a proprietary timing model.

Its fixed-income approach is to move between long term no-load bond funds and money market funds.

Carl J. Kludt, president and portfolio manager, is chief investment officer; Les Cathersal, vice president, is client contact.

## Posthorn Global Asset Management Ltd.

375 Park Ave. Suite 1407, New York, N.Y. 10022; (212) 415-0802

| | |
|---|---|
| Total assets managed | $596,000,000 |
| Tax-exempt assets managed | $596,000,000 |
| International assets managed | $596,000,000 |
| Minimum separate account | $15,000,000 |
| Types of accounts managed | CFG |
| No. of portfolio managers | 10 |
| Size of research staff | 6 |

Posthorn Global Asset Management Ltd. is an international equity and fixed-income manager.

Its equity approach is thematic, identifying global investment themes or forces and using valuation screens to select attractively priced companies benefiting from these themes.

Its fixed-income approach is based on active currency and interest rate management. Returns in four major currency blocks are forecast to take significant currency and interest rate bets, controlling risk-and-return trade-offs. Currency options are used.

The asset mix Jan. 1 was 74% equities and 26% fixed-income.

The parent is Shearson Lehman Hutton, a unit of American Express.

Karl Van Horn, chairman, is chief investment officer; Susan Leader, director-marketing, is client contact.

## Potomac Asset Management

5247 Wisconsin Ave. N.W., Suite 5, Washington, D.C. 20015; (202) 364-6900

| | |
|---|---|
| Total assets managed | $278,000,000 |
| Tax-exempt assets managed | $266,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 28 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 4 |
| Size of research staff | 2 |

Potomac Asset Management Inc. is an equity, fixed-income and balanced manager.

Its bottom-up equity approach is value oriented and risk averse, using Graham & Dodd analysis to screen for emerging growth, growth or special situation stocks. An earnings-yield screen is used.

Its fixed-income approach uses economic analysis and forecasting to determine interest sensitivity of the portfolio. Maturity selections are based on yield curve. All corporate assets are available for swapping.

Clients include Operating Engineers, Steamship Trade Association and Dyncorp.

Peter Ladd Gilsey is chief investment officer; Howard Tucker is client contact.

## Prescott Asset Management

1331 Euclid Ave., Cleveland, Ohio 44115; (216) 696-3360

| | |
|---|---|
| Total assets managed | $512,000,000 |
| Tax-exempt assets managed | $329,000,000 |
| Real estate assets managed | $15,000,000 |
| International assets managed | $2,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 154 |
| Types of accounts managed | CEF |

Prescott Asset Management is an equity, fixed-income and balanced manager.

Its equity approach uses Graham & Dodd principles to identify low p/e stocks. A blend of top-down "central tendency" industry and fundamental value analyses define how the market will value assets under the prevailing and future environments.

The parent company is Prescott, Ball & Turben Inc.

Robert M. Hosler, senior vice president, is the client contact.

## Rowe Price-Fleming International Inc.

100 E. Pratt St., Baltimore, Md. 21202; (301) 547-2141

| | |
|---|---|
| Total assets managed | $7,538,000,000 |
| Tax-exempt assets managed | $2,006,000,000 |
| 401(k)/457 assets managed | $11,000,000 |
| International assets managed | $2,006,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 23 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 11 |
| Size of research staff | 86 |

Rowe Price-Fleming International Inc. is an international manager.

Its equity approach uses top-down/bottom-up methods and country selection as key components of its overall investment strategy.

Its fixed-income approach applies an analysis of interest and exchange rate movements over a short and intermediate range to obtain a balance between income and capital appreciation.

The asset mix Jan. 1 was 72% stocks, 15% bonds and 13% cash.

The firm follows 1,500 stocks closely and 2,500, generally; 95% of the research is generated internally.

The parent company is T. Rowe Price Associates/Fleming Group.

Clients include GM, GTE, The Common Fund and Oregon.

Martin G. Wade, president, is the chief investment officer; George A. Murnaghan, vice president, is the client contact.

## T. Rowe Price Associates

100 E. Pratt St., Baltimore, Md. 21202; (301) 547-2000

| | |
|---|---|
| Total assets managed | $20,130,000,000 |
| Tax-exempt assets managed | $8,705,000,000 |
| 401(k)/457 assets managed | $1,060,000,000 |
| Real estate assets managed | $886,000,000 |
| Index funds managed | $1,892,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 164 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 18 |
| Size of research staff | 35 |

T. Rowe Price Associates Inc. is an equity, fixed-income, balanced, real estate, international, GIC and venture capital manager.

It offers a range of active and semi-passive strategies. Internally generated fundamental research is used to identify trends and companies of interest. Options are used. Its active fixed-income approach uses economic analysis, interest rate anticipation and duration analysis. In-house credit research helps avoid volatility.

The asset mix Jan. 1 was 40% stocks, 30% bonds, 18% cash, 1% equity real estate, 10% mortgage-backed securities and 1% venture capital; $1.892 billion was in bond indexed funds.

The firm follows 250 stocks closely and 350, generally; 90% of research is generated internally.

Charles H. Salisbury Jr., vice president and director, is client contact.

### 25 largest international managers*

| Firm | $ millions |
|---|---|
| Fiduciary Trust | 4,554 |
| State Street Bank | 3,500 |
| Capital Guardian | 2,846 |
| Morgan Grenfell | 2,378 |
| First Chicago | 2,310 |
| Bankers Trust | 2,128 |
| Rowe Price-Fleming | 2,006 |
| Templeton Int'l | 2,000 |
| Grantham, Mayo | 1,857 |
| Scudder, Stevens & Clark | 1,819 |
| Baring Int'l | 1,801 |
| Fidelity Int'l | 1,600 |
| WorldInvest | 1,535 |
| Chase Investors | 1,477 |
| N.M. Rothschild Int'l | 1,420 |
| Schroder Capital | 1,400 |
| Warburg Investment | 1,146 |
| GE Investments | 1,100 |
| Nomura Capital | 951 |
| PCM Int'l | 864 |
| Wells Fargo | 802 |
| G.T. Capital | 737 |
| Mellon-Pictet Int'l | 630 |
| Posthorn Global Asset | 596 |
| Oechsle Int'l | 585 |
| **Total** | **42,042** |

* ranked by U.S. tax-exempt assets invested overseas.

## PRIMA

30665 Northwestern Highway, Farmington Hills, Mich. 48333; (313) 737-3740

See entry for INDEPENDENCE ONE INVESTMENT SERVICES.

## PRIMCO Capital Management Inc.

535 Brown & Williamson Tower, Louisville, Ky. 40202; (502) 589-2011

| | |
|---|---|
| Total assets managed | $3,500,000,000 |
| Tax-exempt assets managed | $3,500,000,000 |
| 401(k)/457 assets managed | $2,800,000,000 |
| 401(k)/457 clients | 27 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients | 34 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 3 |
| Size of research staff | 3 |

PRIMCO Capital Management Inc. is a GIC manager.

Its fixed-income approach concentrates on sector and issuer analysis allowing for the minimization or elimination of risk charges otherwise assessed the portfolio with the benefit of maximized GIC yields in all interest rate environments accruing to the fund.

All assets were in GICs Jan. 1; 75% of research is generated internally.

Clients include Burlington Northern, Hughes Aircraft, Occidental Petroleum and Texas Instruments.

Vernon S. Hodge, principal, is chief investment officer; John J. Monahan, principal, is client contact. For new business, call: (404) 876-2067.

## PRIMECAP Management Co.

225 S. Lake Ave. Suite 400, Pasadena, Calif. 91101-3005; (818) 304-9222

| | |
|---|---|
| Total assets managed | $1,900,000,000 |
| Tax-exempt assets managed | $1,735,000,000 |
| Minimum separate account | $100,000,000 |
| Tax-exempt clients | 20 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 5 |
| Size of research staff | 32 |

PRIMECAP Management Co., an equity manager, uses fundamental analysis with growth stock and sector rotation. It has a value orientation and a focus on long-term capital growth.

The asset mix Jan. 1 was 93% stocks and 7% cash.

It follows 300 stocks closely and 900, generally; 75% of research is generated internally.

Clients include Eastman Kodak, Bell Atlantic, Caterpillar and Ford.

Howard B. Schow, chairman, is chief investment officer; Mitchell J. Milias, president, is client contact.

## Princeton Investment Management

145 Witherspoon St., Princeton, N.J. 08542; (609) 924-6070

| | |
|---|---|
| Total assets managed | $60,000,000 |
| Tax-exempt assets managed | $15,000,000 |
| International assets managed | $1,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 5 |
| Types of accounts managed | CF |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

Princeton Investment Management is an equity, fixed-income and balanced manager.

Its value-oriented equity approach uses Graham & Dodd analysis and low p/e ratio screens. Its fixed-income approach uses sector analysis and interest rate anticipation. Options are used.

It follows 90 stocks closely and 100, generally; 10% of research is generated internally.

The parent company is Primm & Company Inc.

William Primm is chief investment officer and client contact.

## The Principal

711 High St., Des Moines, Iowa 50309; (515) 247-5041

| | |
|---|---|
| Total assets managed | $18,216,900,000 |
| Tax-exempt assets managed: | |
| Total | $12,209,000,000 |
| Pooled accounts | $829,000,000 |
| GICs | $4,175,000,000 |
| Annuities | $2,930,000,000 |
| Other | $4,275,000,000 |
| 401(k)/457 assets managed | $1,865,000,000 |
| 401(k)/457 clients | 3,853 |
| Real estate assets managed | $218,000,000 |
| International assets managed | $18,000,000 |
| Tax-exempt clients | 5,534 |
| Types of accounts managed | CEG |

The Principal is an equity, fixed-income, balanced, real estate, international and GIC manager.

Its equity approach is value oriented, using Graham & Dodd analysis and low p/e stocks. Its fixed-income approach uses interest rate anticipation and sector analysis.

The separate account asset mix Jan. 1 was 2% stocks, 2% bonds, 59% cash, 10% equity real estate, 16% mortgages and 11% private placements; $18 million was in foreign stocks.

The parent company is CrownX.

A.G. Wirth, senior vice president-investments, is chief investment officer; John Mullis, assistant vice president-director of sales, is client contact at (703) 684-4561.

## Property Capital Associates

200 Clarendon St., Boston, Mass. 02116; (617) 536-8600

| | |
|---|---|
| Total assets managed | $760,000,000 |
| Tax-exempt assets managed | $650,000,000 |
| Real estate assets managed | $650,000,000 |
| Minimum separate account | $50,000,000 |
| Tax-exempt clients | 50 |
| Types of accounts managed | CEFG |

Property Capital Associates is a real estate manager.

Its real estate approach is to invest selectively in major income-producing properties nationwide.

It seeks relatively high yields and inflation protection through increases in current returns and long-term capital values.

All assets Jan. 1 were in equity real estate.

Clients include Allied-Signal, Eastman Kodak, Harvard University and Maine State Retirement.

Anthony D. Fox is the chief investment officer; Thomas J. Mizo is the client contact.

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### The Providence Group Investment Advisory Co.

1 Turks Head Place Suite 500, Providence, R.I. 02903; (401) 331-6250

| | |
|---|---|
| Total assets managed | $190,000,000 |
| Tax-exempt assets managed | $25,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 30 |
| Types of accounts managed | C |
| No. of portfolio managers | 4 |
| Size of research staff | 3 |

The Providence Group Investment Advisory Co. is an equity, fixed-income and balanced manager.

Its equity approach stresses growth stocks of companies that dominate their industry or are gaining market share.

Its fixed-income approach uses interest rate anticipation and sector analysis. It selects bonds for minimum volatility and risk, while providing a high level of stable income.

Robert F. Hall and Robert E. Washburn, principals, are chief investment officer; Edwin Johnson and Josephine Carlos are client contacts.

### Provident Capital Management

30 S. 17th St., Philadelphia, Pa. 19103; (215) 561-6000

| | |
|---|---|
| Total assets managed | $3,189,000,000 |
| Tax-exempt assets managed | $3,189,000,000 |
| 401(k)/457 assets managed | $95,000,000 |
| 401(k)/457 clients | 35 |
| International assets managed | $33,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 192 |
| Types of accounts managed | CEG |
| No. of portfolio managers | 9 |
| Size of research staff | 1 |

Provident Capital Management is an equity, fixed-income, balanced and international manager.

Its team- and value-oriented equity approach uses a bottom-up strategy focusing on low p/es. Its fixed-income approach uses a full range of securities with sector analysis and interest rate anticipation driving duration.

The asset mix Jan. 1 was 60% stocks, 34% bonds and 6% cash; $33 million was in foreign stocks.

The firm follows 250 stocks closely and 600, generally; 75% of research is generated internally.

The parent is PNC Financial.

Clients include Westinghouse Electric, Boeing and the NYSE.

Paul R. Lesutis is chief investment officer; Glenn E. Becker, senior vice president and director of marketing, is client contact.

### Provident Investment Counsel Inc.

225 S. Lake Ave., Pasadena, Calif. 91001; (818) 449-8500

| | |
|---|---|
| Total assets managed | $3,221,000,000 |
| Tax-exempt assets managed | $2,244,000,000 |
| Real estate assets managed | $25,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 223 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 9 |
| Size of research staff | 9 |

Provident Investment Counsel Inc. is an equity, fixed-income and balanced manager.

Its equity approach combines growth and emerging growth stocks. It systematically and in a disciplined manner buys companies that have superior financial characteristics and are experiencing an accelerating rate of earnings growth.

Its fixed-income approach is based on interest rate trend recognition and the study of macroeconomic factors influencing that trend.

Sector weightings for fixed income are based on computer-aided relative value analysis.

The asset mix Jan. 1 was 68% stocks, 8% bonds and 24% cash.

The firm follows 60 stocks closely and 150 generally; 70% of the research is generated internally.

Clients include GTE, International Paper, McGraw Hill and California State Teachers.

Robert M. Kommerstad, chairman, is chief investment officer; Jeffrey J. Miller, executive vice president, is client contact.


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Mary O'Gorman, Senior Vice President

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### Provident Mutual Life Insurance Co.

1600 Market St., Philadelphia, Pa. 19101; (215) 636-5000

| | |
|---|---|
| Total assets managed | $2,636,000,000 |
| Tax-exempt assets managed: | |
| Total | $739,000,000 |
| Pooled accounts | $78,000,000 |
| GICs | $332,000,000 |
| Other | $329,000,000 |
| 401(k)/457 assets managed | $127,000,000 |
| Tax-exempt clients | 320 |
| Types of accounts managed | CGJ |
| No. of portfolio managers | 5 |
| Size of research staff | 5 |

Provident Mutual Life Insurance Co. is an equity, fixed-income, balanced, GIC and money market manager.

Its equity approach is to purchase stocks with low p/es to obtain the best investment value and return.

Its fixed-income approach is a combination of interest rate anticipation and sector analysis. Fixed-income futures are used in separate accounts.

The separate account asset mix Jan. 1 was 72% stocks, 15% bonds, 12% money markets and 1% other.

Its clients include Philadelphia Redevelopment Authority, Indiana Gas, ZMEX and North Carolina Baptist Hospital.

Stan Reber, senior vice president, is chief investment officer; Andy Witman, director-pension marketing, is client contact.

### Provident National Assurance Co.

1 Fountain Square, Chattanooga, Tenn. 37402; (615) 755-1901

| | |
|---|---|
| Total assets managed | $4,967,000,000 |
| Tax-exempt assets managed: | |
| Total | $4,951,000,000 |
| Pooled accounts | $83,000,000 |
| GICs | $4,138,000,000 |
| Annuities | $542,000,000 |
| Other | $208,000,000 |
| 401(k)/457 assets managed | $3,278,000,000 |
| 401(k)/457 clients | 300 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 2 |
| Size of research staff | 8 |

Provident National Assurance Co. is primarily a GIC and annuities manager.

The asset mix Jan. 1 was 57% bonds, 42% mortgages and 1% cash.

The parent company is Provident Life & Accident Insurance Co.

Clients include Xerox, Conoco, AT&T and Unisys.

Thomas C. Hardy, executive vice president and chief financial officer, is chief investment officer; Winston C. Profio, vice president-marketing, is client contact.

### Prudential Asset Management Group

745 Broad St., Newark, N.J., 07101; (201) 877-8697

| | |
|---|---|
| Total assets managed | $55,166,000,000 |
| Tax-exempt assets managed: | |
| Total | $55,166,000,000 |
| Pooled accounts | $11,378,000,000 |
| Separate accounts | $9,263,000,000 |
| GICs | $14,916,000,000 |
| Annuities | $9,836,000,000 |
| Other | $9,773,000,000 |
| 401(k)/457 assets managed | $3,700,000,000 |
| 401(k)/457 clients | 246 |
| Real estate assets managed | $4,915,000,000 |
| International assets managed | $371,000,000 |
| Indexed assets managed | $1,240,000,000 |
| Dedicated assets managed | $4,913,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 600 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 39 |

Prudential Asset Management Group offers equity, fixed-income, balanced, international, real estate, GIC and venture capital management through its separately managed units.

Its separate accounts asset mix Jan. 1 was 27% stocks, 43% bonds, 6% cash, 23% equity real estate and 1% mortgages.

The parent company is Prudential Insurance Co. of America.

Clients include Alcoa, IBM, PG&E and Western Conference of Teamsters.

Garnett L. Keith, vice chairman, Prudential Investment Corp., is chief investment officer. James A. Blanchard, senior vice president, Prudential Asset Management Co., is client contact.

The Prudential Asset Management Group is composed of the following

units. Assets managed by these firms is reflected in the Prudential Asset Group data listed above.

- PRIFORM Investment Management, with more than $1.5 billion, invests in large-cap (S&P 500) stocks with good fundamental earnings and selling at attractive relative prices.
- MIDCO Investors, with about $729 million, manages equity portfolios of companies having capitalizations from $75 million to $600 million.
- Investment Index Technologies Inc., with manages approximately $889 million, manages domestic and foreign stock index portfolios.
- Prudential Fixed Income Advisors manages more than $8.5 billion in private placements and bond index funds, dedicated and immunized portfolios, laddered maturity and high-yield bond portfolios, and money market funds.
- The Prudential Realty Group manages almost $5 billion in real estate investments for institutional clients.
- Prudential Diversified Investment Strategies provides asset allocation services and discretionary portfolio management for more than $6.9 billion.
- The Prudential Venture Capital Management Co. invests $300 million in direct and partnership venture funding.
- The Prudential Insurance Co. of America manages $34.5 billion in guaranteed investment contracts.

Other units of the Prudential Asset Management Group, whose assets are not reflected in the data above, and that are profiled separately are: Matrix Capital Management; PCM International; GIM Global Advisors; and Mercator Asset Management.

In early 1988, Prudential Asset Management Group acquired Capital Supervisors Inc., and Hallmark Capital Management Inc. These two firms are profiled separately; their assets are not reflected in the data above.

### Prudential Assurance Co.

300-141 Adelaide St. W., Toronto, Ontario M5H 3L9; (416) 362-4441

| | |
|---|---|
| Total assets managed | $2,650,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,050,000,000 |
| For subsidiaries of U.S. firms | $35,000,000 |
| Dedicated assets | $25,000,000 |
| Minimum separate account | $4,000,000 |
| Tax-exempt clients | 74 |
| U.S. subsidiaries | 8 |
| Types of accounts managed | C |
| No. of portfolio managers | 7 |

Prudential Assurance Co. Ltd. Pension Fund Management, is an equity, fixed-income and balanced manager.

Its equity approach is fundamentalist and active, using sector rotation, market timing and Graham & Dodd analysis. It concentrates on marketable Canadian stocks and weights industries against index-sub groups. Quantitative analysis is used to construct U.S. portfolios.

Its fixed-income approach uses interest rate anticipation, concentrating on high-quality, marketable bonds. Portfolios are well diversified and actively traded.

The asset mix Jan. 1 was 37% Canadian stocks, 7% U.S. stocks, 42% bonds and 14% cash.

It follows 50 stocks closely and 100, generally; 10% of research is generated internally.

Clients include Marks & Spencer, Glengary Transport and Toyota Canada.

The parent is Prudential Corp., London.

R.W. Morrison, senior vice president-investments, is chief investment officer; K. Kukkonen, manager-pension sales, is client contact.

### Prudential-Bache Investment

1 Seaport Plaza, New York, N.Y. 10292; (212) 214-4530

| | |
|---|---|
| Total assets managed | $1,000,000,000 |
| Tax-exempt assets managed | $250,000,000 |
| 401(k)/457 assets managed | $25,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 125 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 8 |
| Size of research staff | 1 |

Prudential-Bache Investment Management is an equity, fixed-income and balanced manager.

Its equity approach seeks undervalued equities through the application of basic Graham & Dodd-type security analysis. Options are used. Its fixed-income approach is passive.

The parent company is Prudential-Bache Securities, a subsidiary of Prudential Insurance.

Clients include Corpus Christi Relief & Retirement Firemen's Fund and Rider College.

Stuart Shikiar, managing director, is chief investment officer; Jeffrey Laikind, managing director, is client contact.

### PSM Investors Inc.

121 Judy Farm Road, Carlisle, Mass. 01741; (617) 369-0033

| | |
|---|---|
| Total assets managed | $375,000,000 |
| Tax-exempt assets managed | $325,000,000 |
| Minimum separate account | $50,000 |
| Types of accounts managed | CJ |
| No. of portfolio managers | 1 |

PSM Investors Inc., an equity manager, uses mutual funds, switching funds as market conditions warrant.

All research is generated internally.

Clients include Chem-Met, Architectural Resources and Thermal Recovery Systems.

Stan Lipstadt, president, is chief investment officer and client contact.

### Public Storage Inc.

1015 Grandview Ave., Glendale, Calif. 91201; (818) 244-8080

| | |
|---|---|
| Total assets managed | $2,350,000,000 |
| Tax-exempt assets managed | $722,000,000 |
| Real estate assets managed | $722,000,000 |
| Minimum separate account | $15,000,000 |
| Tax-exempt clients | 120 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 12 |
| Size of research staff | 21 |

Public Storage Inc. is a real estate manager.

It acquires commercial and high-grade industrial sites and develops, on an all-cash basis, self-storage facilities and business parks.

All assets Jan. 1 were in equity real estate.

Clients include Ameritech, Eastman Kodak, United Technologies and Ford.

Hugh Horne, president-acquisitions and development division, is chief investment officer; Nori Gerardo, senior vice president-institutional realty, is client contact.

### Putnam Cos. Inc.

1 Post Office Square, Boston, Mass. 02109; (617) 646-1200

| | |
|---|---|
| Total assets managed | $40,646,000,000 |
| Tax-exempt assets managed | $7,361,000,000 |
| 401(k)/457 assets managed | $77,000,000 |
| 401(k)/457 clients | 2 |
| Real estate assets managed | $220,000,000 |
| International assets managed | $316,000,000 |
| Index funds managed | $1,622,000,000 |
| Dedicated funds managed | $597,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 101 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 41 |
| Size of research staff | 49 |

Putnam Cos. Inc. is an equity, fixed-income, balanced, international and GIC manager.

Its growth-oriented equity approach seeks investment positions in three areas: quality growth, focusing on large-cap stocks with superior dividend and earnings growth; specialty equity, concentrating on medium- and small-cap companies with rapid earnings growth; and basic value, seeking undervalued companies with earnings and dividend growth rates equal to the market and above-market yield.

Its active fixed-income approach is disciplined and systematic, working to achieve predictable returns independent of interest rate moves and seeking opportunities in yield curve changes.

The asset mix Jan. 1 was 23% stocks, 69% bonds, 5% cash and 3% mortgage-backed securities. As of the same date, the firm had $168 million in foreign stocks, $48 million in foreign bonds and $1.62 billion in bond indexed funds.

The parent company is Marsh & McLennan Cos. Inc.

Chief investment officers are Francis

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Sally Hudson,
Director of Institutional Marketing Services
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****The "Salomon Brothers Broad Investment-Grade Bond Index" is a trademark of Salomon Brothers Inc.*

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H.M. Kelly, equities; Gary N. Coburn, fixed income; and Anthony W. Regan, international. Orie L. Dudley, senior managing director, is client contact.

### PVG Asset Management
650 S. Cherry St. Suite 1220, Denver, Colo. 80222; (303) 322-4414

| | |
|---|---|
| Total assets managed | $20,000,000 |
| Tax-exempt assets managed | $20,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 16 |
| Types of accounts managed | CE |
| No. of portfolio managers | 2 |

PVG Asset Management Corp. is a tactical asset allocation manager. It seeks to determine an asset mix that will optimize an investment portfolio for risk and return.

The parent company is Financial Programs Inc.

William C. Rahmig is the chief investment officer; Joseph N. Pecoraro is the client contact.

## Q

### Qualified Counseling Inc.
46 Prince St., Rochester, N.Y. 14607; (716) 461-9130

| | |
|---|---|
| Total assets managed | $150,000,000 |
| Tax-exempt assets managed | $90,000,000 |
| Real estate assets managed | $6,000,000 |
| Dedicated funds managed | $5,000,000 |
| Minimum separate account | $300,000 |
| Tax-exempt clients | 125 |
| Types of accounts managed | CEJG |
| No. of portfolio managers | 5 |

Qualified Counseling Inc. is an equity, fixed-income, balanced and cash manager.

Its equity approach uses sector rotation and takes a conservative, top-down approach, selecting undervalued sectors and industries within which specific stocks are chosen. It also uses a top-down approach to develop the interest rate scenario and sector analysis for fixed-income decisions.

The firm follows 40 stocks closely and 200, generally.

Fred C. Gregory is chief investment officer; Norman C. Hughes is client contact.

### Qualivest Capital Management Inc.
P.O. Box 2758, Portland, Ore. 97208; (503) 275-6806

| | |
|---|---|
| Total assets managed | $1,763,000,000 |
| Tax-exempt assets managed | $603,000,000 |
| 401(k)/457 assets managed | $424,000,000 |
| 401(k)/457 clients | 13 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 25 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 7 |
| Size of research staff | 1 |

Qualivest Capital Management Inc. is an equity, fixed-income, balanced and GIC manager.

Its equity approach is emerging growth, low p/e and sector rotation. Its fixed-income approach uses sector analysis and is actively managed.

The asset mix Jan. 1 was 60% stocks and 40% bonds.

The firm follows 100 stocks closely and 90 to 100, generally; all research is generated internally.

The parent company is U.S. Bancorp.

Gary K. Sweitzer is the chief investment officer; Linda D. Davis, account manager, is the client contact.

### Quantitative Asset Management Group
1 S. Wacker Drive, Suite 1580, Chicago, Ill. 60606; (312) 977-4173

| | |
|---|---|
| Total assets managed | $0 |
| Minimum separate account | $2,000,000 |
| No. of portfolio managers | 3 |
| Size of research staff | 3 |

Quantitative Asset Management Group is a new fixed-income manager and international/global manager. It offers portfolio insurance.

Its approach emphasizes active yield enhancement, using options and futures. The firm will create a synthetic Treasury bond when the relative price of futures is less than the relative price of the actual 30-year T-bond. It takes advantage of the difficulty in pricing futures with a model that enables it to better value the contracts.

The parent company is Drexel Burnham Lambert Inc.

Fred Arditti is the chief investment officer; Richard Bindler is the client contact.

### Quantum Investment Management Inc.
885 Third Ave., Suite 810, New York, N.Y. 10022; (212) 230-2500

See entry for THE CHEMICAL INVESTMENT GROUP.

## R

### RAC Advisors Inc.
4000 Town Center Suite 101, Southfield, Mich. 48075; (313) 358-2282

| | |
|---|---|
| Total assets managed | $14,000,000 |
| Tax-exempt assets managed | $14,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 4 |
| Types of accounts managed | CF |
| No. of portfolio managers | 1 |

RAC Advisors, Inc. is a balanced manager.

Its equity approach uses growth stocks and a low-risk, high-potential valuation method with an emphasis on Graham & Dodd. Its fixed-income approach is passive.

The firm follows 50 stocks closely and 200, generally; 50% of the research is generated internally.

The parent company is Rodecker & Co. Investment Brokers Inc.

Clients include the Helen DeRoy and Bauervic-Carroll Foundations.

Arthur Rodecker is the chief investment officer and client contact.

### Rampart Investment Management Co. Inc.
Exchange Place, Suite 2800, Boston, Mass. 02109; (617) 742-7400

| | |
|---|---|
| Total assets managed | $450,000,000 |
| Tax-exempt assets managed | 0 |
| Minimum separate account | $5,000,000 |
| No. of portfolio managers | 6 |

Rampart Investment Management Co. Inc. is a defined risk-hedged equity and option overwriting manager.

Its equity approach uses defined risk hedged equity, targeting the market's long-term rate of return with 50% to 60% less volatility, and using exchange-traded options to predefine and minimize risk exposure.

Options are used.

It manages $100 million in options overwriting accounts that are not included in the total assets figure.

The firm follows 100 stocks closely and 100 generally; 20% of the research is generated internally.

George M. DeVoe Jr., is the chief investment officer; R. Ronald Guerriero is the client contact.

### RCM Capital Management
4 Embarcadero Center, Suite 2900, San Francisco, Calif. 94111; (415) 954-5474

| | |
|---|---|
| Total assets managed | $10,875,000,000 |
| Tax-exempt assets managed | $9,675,000,000 |
| Real estate assets managed | $1,506,000,000 |
| Dedicated funds managed | $31,000,000 |
| Minimum separate account | $15,000,000 |
| Tax-exempt clients | 95 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 9 |
| Size of research staff | 22 |

RCM Capital Management is an equity, fixed-income and balanced manager. The firm offers GIC management through its affiliate, Certus Financial Corp.

Its equity approach uses sector rotation, emphasizing growth and emerging growth stocks. It uses screens to find securities whose growth in earnings and dividends will provide a total return greater than the market.

The firm actively manages fixed-income portfolios to achieve consistently superior relative and absolute rates of return.

The firm constantly monitors, balances and quantifies risk. Sector analysis and active duration management are used.

Stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 49% stocks, 21% bonds, 14% cash and 16% mortgage-backed securities.

Clients include Chevron, Southern California Edison, Tektronix and Xerox.

Claude N. Rosenberg Jr. is the chief investment officer.

Melody L. McDonald, director of client services, is the client contact.

### Reams Asset Management
227 Washington St., Columbus, Ind. 47201; (812) 372-6606

| | |
|---|---|
| Total assets managed | $943,000,000 |
| Tax-exempt assets managed | $943,000,000 |
| Minimum separate account | $50,000,000 |
| Tax-exempt clients | 3 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |
| Size of research staff | 5 |

Reams Asset Management is an equity, fixed-income and balanced manager.

Its equity approach emphasizes security selection; low p/e stocks are favored. Foreign securities are included in all portfolios.

Its fixed-income approach uses interest rate anticipation, seeking long-term total returns. Foreign securities are in all portfolios.

The asset mix Jan. 1 was 58% stocks, 33% bonds and 9% cash.

The firm follows 150 stocks closely and 50, generally; all research is generated internally.

Clients include Cummins Engine.

Fred W. Reams is chief investment officer; L. Paul Berman, senior vice president, is client contact.

### W.H. Reaves & Co. Inc.
30 Montgomery St., Jersey City, N.J. 07302; (212) 422-1433

| | |
|---|---|
| Total assets managed | $580,000,000 |
| Tax-exempt assets managed | $580,000,000 |
| 401(k)/457 assets managed | $27,000,000 |
| 401(k)/457 clients | 2 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 26 |
| Types of accounts managed | CF |
| No. of portfolio managers | 4 |
| Size of research staff | 5 |

W.H. Reaves & Co. Inc., a special equity manager, takes a conservative approach, committed exclusively to investments in electric utilities, natural gas, energy and telecommunication common stocks. It emphasizes capital preservation and low risk.

The asset mix Jan. 1 was 91% stocks and 9% cash.

The firm follows 200 stocks closely and 200 generally; all research is generated internally.

Clients include Eli Lilly, Teco Energy, Public Service Electric & Gas and Aerospace.

William Reaves is the chief investment officer and client contact.

### Red Oak Advisors Inc.
Park 80 West, Plaza One, Saddle Brook, N.J. 07662; (201) 712-1990

| | |
|---|---|
| Total assets managed | $15,000,000 |
| Tax-exempt assets managed | $10,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | CJ |
| No. of portfolio managers | 2 |

Red Oak Advisors Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses defensive/value investment management, emphasizing above-average dividend yield, low p/e ratio and low ratio of price to tangible book value.

Its fixed-income approach is quantitative, using confirmed change in the interaction between interest rate momentum and "real" rate level.

Stock index futures and fixed-income futures are used.

Gary A. Gerstein and Thomas R. Jackson, managing directors, are chief investment officers; Mr. Gerstein is the client contact.

### J.W. Redmond & Co.
1750 Pennsylvania Ave. N.W., Washington, D.C. 20006; (202) 393-7900

| | |
|---|---|
| Total assets managed | $120,000,000 |
| Tax-exempt assets managed | $2,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 1 |
| Types of accounts managed | E |
| No. of portfolio managers | 3 |
| Size of research staff | 3 |

J.W. Redmond & Co. is an equity, fixed-income and balanced manager.

Its equity approach emphasizes growth stocks, sector rotation and Graham & Dodd analysis.

Its fixed-income approach uses interest rate anticipation and sector analysis.

J. Woodward Redmond, president, is the chief investment officer.

### Regan Money Managers
3500 W. 80th St., Suite 195, Minneapolis, Minn. 55431; (612) 835-1185

| | |
|---|---|
| Total assets managed | $90,000,000 |
| Tax-exempt assets managed | $52,000,000 |
| International assets managed | $12,000,000 |
| Tax-exempt clients | 34 |
| Types of accounts managed | CF |
| No. of portfolio managers | 2 |
| Size of research staff | 3 |

Regan Money Managers is a capital preservation manager.

Its approach is based on a risk-averse asset allocation strategy that uses foreign and domestic liquid assets to maintain the purchasing power of money.

The firm follows 200 stocks closely and 1,500 generally; 20% of the research is generated internally.

Robert M. Regan is the chief investment officer; Carl K. Luxem Jr. is the client contact.

### Reich & Tang L.P.
100 Park Ave., New York, N.Y. 10017; (212) 370-1110

| | |
|---|---|
| Total assets managed | $4,709,000,000 |
| Tax-exempt assets managed | $1,111,000,000 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients | 37 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 5 |

Reich & Tang L.P. is an equity manager.

Its equity approach emphasizes growth and low p/e stocks, looking for companies with a discount valuation and above-average prospective growth.

The asset mix Jan. 1 was 82% stocks, 1% bonds and 17% cash.

The firm follows 75 stocks closely and 150 generally; all of the research is generated internally.

Clients include RJR Nabisco, General Mills and the Henry J. Kaiser Foundation.

Robert F. Hoerle is the chief investment officer; Gene A. Hoots is the client contact.

### Reimer and Koger Associates Inc.
8500 W. 63rd, Suite 105, Shawnee Mission, Kan. 66202; (913) 236-6700

| | |
|---|---|
| Total assets managed | $962,000,000 |
| Tax-exempt assets managed | $815,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 38 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 6 |

Reimer and Koger Associates Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses growth and emerging growth stocks, sector rotation and market timing, rotating by themes developed along perceived economic changes.

Issues are selected for purchase and sale by quantitatively screening 100 issues.

Its fixed-income approach uses interest rate anticipation, utilizing a duration-based discipline that seeks higher-than-market returns with market risk or less.

Options, stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 41% stocks, 49% bonds and 10% cash.

Ronald C. Reimer, managing director, is the chief investment officer; Thomas J. Bash, managing director, is the client contact.

### Reiser-Builder Inc.
7 Piedmont Center, Suite 721, Atlanta, Ga. 30305; (404) 233-9341

| | |
|---|---|
| Total assets managed | $85,000,000 |
| Tax-exempt assets managed | $35,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 30 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 3 |
| Size of research staff | 1 |

Reiser-Builder Inc. is an equity, balanced and options manager.

Its equity approach focuses on companies with a high return on capital and positive earnings momentum. Its fixed-income approach is passive. Options are used.

The firm follows 225 stocks closely and 400 to 500 generally; all research is generated internally.

Clients include Fluor, Equifax and Powell Goldstein.

Robert E. Reiser Jr. is the chief investment officer; Frank W. Draper is the client contact.

### N. Reitenbach & Co. Inc.
485 Fifth Ave. Suite 1042, New York, N.Y. 10017; (212) 661-2400

| | |
|---|---|
| Total assets managed | $10,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $3,000,000 |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

N. Reitenbach & Co. Inc., a global manager, selects companies worldwide that have superior growth rate prospects. Low to moderate p/e ratios are selected.

Currency trends, interest rate anticipation and liquidity are used in the global bond management program.

Warrants are used.

The firm follows 70 stocks closely and 400, generally; 50% of the research is generated internally.

Nicholas Reitenbach, chairman, is chief investment officer and client contact.

### Renaissance Investment Management Inc.
3006 Vernon Place, Cincinnati, Ohio 45219; (513) 281-9800

| | |
|---|---|
| Total assets managed | $1,254,000,000 |
| Tax-exempt assets managed | $1,058,000,000 |
| 401(k)/457 assets managed | $4,000,000 |
| 401(k)/457 clients | 6 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 150 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 7 |
| Size of research staff | 3 |

Renaissance Investment Management Inc. is an equity, fixed-income and balanced manager.

The firm employs a proprietary computer-based asset allocation decision-making model to objectively determine the relative attractiveness of cash equivalents, bonds and equities. Large capitalization, readily marketable securities are stressed.

Its fixed-income approach is disciplined and quantitative, focusing on moving average analysis and spread relationships. Managers adjust portfolio allocation between government bonds and Treasury bills.

The asset mix Jan. 1 was 50% stocks and 50% bonds.

The firm follows 150 stocks closely and 400 generally; all research is generated internally.

Clients include J.M. Smucker, Great American Broadcasting, Kroger and Kansas Power & Light.

Frank W. Terrizzi is the chief investment officer; S. William Miller and Mr. Terrizzi, managing directors, are the client contacts.

### Daniel H. Renberg and Associates Inc.
8383 Wilshire Blvd., Suite 926, Beverly Hills, Calif. 90211; (213) 852-0600

| | |
|---|---|
| Total assets managed | $120,000,000 |
| Tax-exempt assets managed | $62,000,000 |
| Minimum separate account | $300,000 |
| Tax-exempt clients | 62 |
| Types of accounts managed | C |
| No. of portfolio managers | |
| Size of research staff | |

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Daniel H. Renberg and Associates Inc. is an equity and balanced manager.

Its equity approach emphasizes emerging and established growth companies and undervalued/special situation companies. Investments are selected using fundamental analysis.

Fixed-income investments are selected for specific portfolio objectives.

Options are used.

Daniel H. Renberg, president, is the chief investment officer; Clay J. Stratton, vice president, is the client contact.

### Republic National Bank of New York

452 Fifth Ave., New York, N.Y. 10018; (800) 331-7775 or (212) 930-6264

| | |
|---|---|
| Total assets managed | $458,000,000 |
| Tax-exempt assets managed: | |
| Total | $140,000,000 |
| Commingled | $10,000,000 |
| Separate | $130,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients: | |
| Commingled | 10 |
| Separate | 40 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 2 |
| Size of research staff | 4 |

Republic National Bank of New York is an equity, fixed-income and balanced manager.

Its equity and fixed-income approach is to design multimanager, multistyle portfolios through the careful selection of mutual funds. An active management approach is used incorporating economic/political/monetary analysis and asset allocation.

The parent company is Republic New York Corp.

Michael Hirsch, senior vice president, is the chief investment officer; Rachel Levenberg, director-investment marketing, is the client contact.

### Retirement System for Savings Institutions

41 E. 42nd St., New York, N.Y. 10017; (212) 503-0100

| | |
|---|---|
| Total assets managed | $332,000,000 |
| Tax-exempt assets managed | $332,000,000 |
| Tax-exempt clients | 105 |
| Types of accounts managed | C |
| No. of portfolio managers | 8 |
| Size of research staff | 4 |

Retirement System for Savings Institutions is an equity, fixed-income, balanced and international manager.

In addition to the assets listed above, it has responsibility for $232 million managed through other firms.

Its equity approach uses emerging growth and low p/e stocks, sector rotation, tactical asset allocation and Graham & Dodd analysis. Different strategies are used for core, value, growth and international funds. Its fixed-income approach uses interest rate anticipation, concentrating on credit review. Its approach is diversified, offering active and dedicated funds. Financial futures are used.

James P. Coughlin, senior vice president, is chief investment officer; Diane H. Dudzinski, first vice president, is client contact.

### Rice, Hall, James & Associates

1200 Third Ave., No. 1600, San Diego, Calif. 92101; (619) 239-9005

| | |
|---|---|
| Total assets managed | $650,000,000 |
| Tax-exempt assets managed | $490,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 55 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 7 |
| Size of research staff | 3 |

Rice, Hall, James & Associates is an equity, fixed-income and balanced manager.

Its equity approach attempts to identify unrecognized values with high-quality earnings and strong balance sheets. It emphasizes long-term fundamental value and good potential for earnings and dividend growth.

Its fixed-income approach is protective and emphasizes the use of short and intermediate Treasuries.

The firm follows 100 stocks closely and 200 generally; 25% of the research is generated internally.

Louis E. Rice, chairman, is the chief investment officer; Walter H. Beck, senior vice president, is the client contact.

### T.W. Richardson & Co.

6603 Bay St., Emeryville, Calif. 94608; (415) 652-0318

| | |
|---|---|
| Total assets managed | $6,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $5,000,000 |

T.W. Richardson & Co. is a real estate manager.

It does industrial and office land development and building management for its accounts and for controlled partnerships. It also does development consulting for corporate and tax-exempt accounts.

Thomas W. Richardson is the chief investment officer and the client contact.

*Pensions & Investment Age* will publish the master trust directory Aug. 22.

### Richmond Capital Management Inc.

10800 Midlothian Turnpike, Richmond, Va. 23235; (804) 379-8383

| | |
|---|---|
| Total assets managed | $900,000,000 |
| Tax-exempt assets managed | $600,000,000 |
| Real estate assets managed | $30,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 26 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 4 |

Richmond Capital Management Inc., formerly Continental Investment Advisors Ltd., is a fixed-income manager.

Its value-oriented, active approach uses four elements of fundamental value analysis. Managers avoid market timing by remaining fully invested and relying on active trading of corporate securities.

The asset mix Jan. 1 was 87% bonds, 8% cash and 5% mortgage-backed securities.

Clients include Raytheon, State of New Hampshire, University of Michigan and Wisconsin Power & Light.

Charles E. Keller, president, is chief investment officer; L. David Hale, vice president, is client contact.

### The Riggs National Bank of Washington, D.C.

808 17th St., N.W., Washington, D.C. 20006; (202) 835-6000

| | |
|---|---|
| Total assets managed | $2,249,000,000 |
| Tax-exempt assets managed: | |
| Total | $800,000,000 |
| Commingled | $100,000,000 |
| Separate | $700,000,000 |
| 401(k)/457 assets managed | $7,000,000 |
| 401(k)/457 clients | 12 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 100 |
| Separate | 250 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 16 |
| Size of research staff | 4 |

The Riggs National Bank of Washington, D.C., is an equity, fixed-income, balanced and real estate manager.

Its equity approach emphasizes low p/e equities with an above-average dividend yield. Rotation depends upon business cycle; a nearly fully invested position is maintained.

Its fixed-income approach maintains a core position in intermediate bonds, with emphasis on short or long end depending on expectation for interest rate movement.

The asset mix Jan. 1 was 40% stocks, 50% bonds and 10% cash.

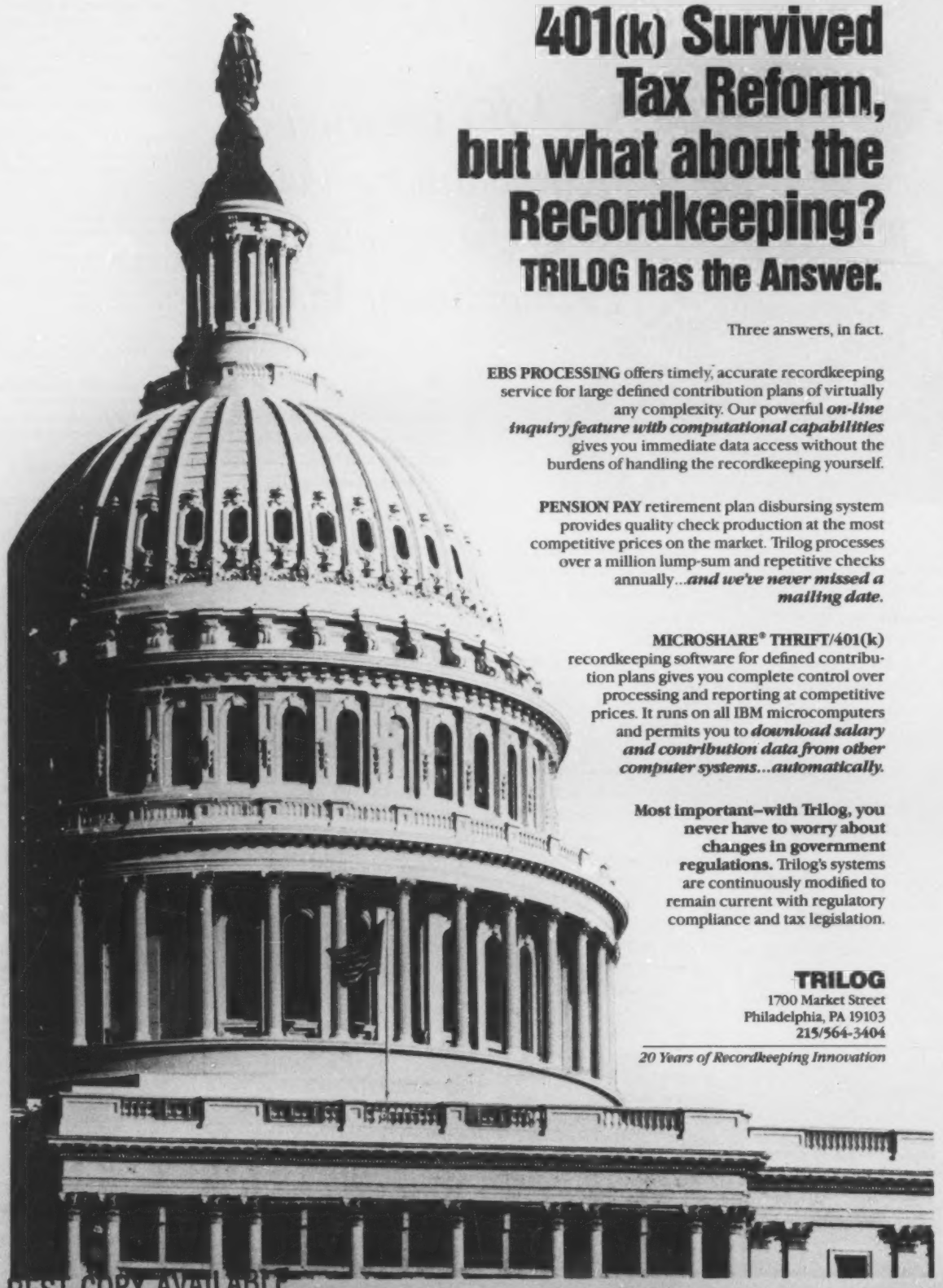
The parent company is Riggs National Corp.

Harold C. Warner, executive vice president, is the chief investment officer; H. Louis French, vice president, is the client contact.

### Rittenhouse Financial Services Inc.

225 S. 18th St., Philadelphia, Pa. 19103; (215) 735-1225

| | |
|---|---|
| Total assets managed | $510,000,000 |
| Tax-exempt assets managed | $280,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 60 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 6 |

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Rittenhouse Financial Services Inc. is an equity, fixed-income and balanced manager.

Its equity approach tries to locate value in the high-equity, large-cap segment. Value is defined as low p/e and above-average yield. Average portfolio beta must be below the market.

In its fixed-income approach, it staggers maturities out to a maximum of 10 years by using only high-quality corporate and government issues and moves along the yield curve to minimize risk and maximize income.

The firm follows 100 stocks closely and 600 generally.

Clients include The Huston Foundation, Graduate Hospital, Historical Society of Pennsylvania and Rosemont College.

James S. Morgan, vice president, is the chief investment officer; Bernard A. Francis, senior vice president, is the client contact.

Leasing: Oct. 3.

## RNC Capital Management

11601 Wilshire Blvd. Penthouse, Los Angeles, Calif. 90025; (213) 477-6543

| | |
|---|---|
| Total assets managed | $1,150,000,000 |
| Tax-exempt assets managed | $750,000,000 |
| Minimum separate account | $250,000 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 10 |
| Size of research staff | 6 |

RNC Capital Management Co. is an equity and fixed-income/convertible manager.

Its equity approach uses low p/e stocks and rotates sectors throughout each economic cycle using only NYSE and AMEX securities. Its fixed-income approach uses sector analysis. Convertibles are stressed over short-term bonds.

The asset mix Jan. 1 was 40% stocks, 35% convertible bonds and 25% cash.

The firm follows 150 stocks closely and 300, generally.

The parent company is Roley Nichols Capital Group Inc.

Thomas L. Roley, chairman, is chief investment officer; Robert W. Nichols, president, is client contact.

## Roanoke Asset Management

10 E. 53rd St., New York, N.Y. 10022; (212) 759-9097

| | |
|---|---|
| Total assets managed | $564,000,000 |
| Tax-exempt assets managed | $504,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 39 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 4 |

Roanoke Asset Management is an equity and balanced manager.

Its equity approach uses opportunistic growth and Graham & Dodd principles. The firm is a bottom-up stock selector focusing on companies and/or industries undergoing a positive fundamental change or improvement.

The asset mix Jan. 1 was 82% stocks, 8% bonds and 10% cash.

The firm follows 60 stocks closely and 100 generally; 65% of the research is generated internally.

Clients include Florida Power & Light, State of Connecticut, Blue Cross and Blue Shield National Retirement Trust and Clorox.

Edwin G. Vroom, president, is the chief investment officer; Martin W. Lynn, principal/portfolio manager, is the client contact.

## Robshaw & Cheskin Associates Inc.

6245 Sheridan Drive, Suite 218, Amherst, N.Y. 14221; (716) 633-6555

| | |
|---|---|
| Total assets managed | $68,000,000 |
| Tax-exempt assets managed | $38,000,000 |
| Minimum separate account | $200,000 |
| Tax-exempt clients | 33 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 2 |
| Size of research staff | 3 |

Robshaw & Cheskin Associates Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses Graham & Dodd principles to screen growth and emerging growth stocks, making a fundamental search for superior long-term appreciation potential/

Its fixed-income approach is based on analysis of sectors, ratings and maturities, using the yield curve and anticipating shifts in the curve.

Stephen R. Robshaw and Alan E. Cheskin are the chief investment officers; Mr. Cheskin is the client contact.

## Rocky Mountain Investors

3200 Cherry Creek South Drive, Suite 430, Denver, Colo. 80209; (303) 777-3200

| | |
|---|---|
| Total assets managed | $115,000,000 |
| Tax-exempt assets managed | $115,000,000 |
| Real estate assets managed | $88,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 18 |
| Types of accounts managed | J |
| No. of portfolio managers | 2 |
| Size of research staff | 3 |

Rocky Mountain Investors Inc. is a real estate and short-term cash manager.

Its real estate approach is to provide short-term construction loans on behalf of the Taft-Hartley clients for high-quality, union-built commercial and industrial projects.

The parent company is RMI Holdings Inc.

J. Richard Allen, president, is the chief investment officer; F. Robert Lee, vice president, is the client contact.

## Roll and Ross Asset Management Corp.

Blue Bell West Bldg., Blue Bell, Pa. 19422; (215) 540-1126

| | |
|---|---|
| Total assets managed | $500,000,000 |
| Tax-exempt assets managed | $500,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 6 |
| Types of accounts managed | CFG |
| No. of portfolio managers | 4 |

Roll and Ross Asset Management Corp., is an equity, fixed-income and international manager.

Its quantitative equity approach employs a multifactor risk measurement technique. Its fixed-income approach is also quantitative.

The asset mix Jan. 1 was 99% stocks and 1% cash.

The firm follows 2,000 stocks closely.

Clients include Agway, Sunkist, and California Employees.

Richard Roll is chief investment officer; Alan Yuhas is client contact.

## Edward C. Rorer & Co. Inc.

1800 2 Mellon Bank Center, Philadelphia, Pa. 19102; (215) 568-2126

| | |
|---|---|
| Total assets managed | $50,000,000 |
| Tax-exempt assets managed | $20,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

Edward C. Rorer & Co. Inc. is an equity and balanced manager.

Its equity approach employs a proprietary computer model to evaluate investment prospects on a relative valuation basis. Relative p/e, relative price/book and relative yield are emphasized.

Its fixed-income approach uses interest rate anticipation.

Options are used.

The firm follows 50 stocks closely and 350 generally; 50% of the research is generated internally.

Edward C. Rorer, chairman, is chief investment officer and client contact.

## Rosenberg Institutional Equity Management

4 Orinda Way, Suite 300E, Orinda, Calif. 94563; (415) 254-6464

| | |
|---|---|
| Total assets managed | $2,091,000,000 |
| Tax-exempt assets managed | $1,784,000,000 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 20 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 1 |
| Size of research staff | 3 |

Rosenberg Institutional Equity Management, a quantitative equity manager, uses proprietary in-house valuation models to analyze fundamental data on 3,500 stocks. It identifies moderately undervalued companies in every sector and constructs efficient portfolios of such stocks.

All assets were in stocks Jan. 1.

The firm follows 500 stocks closely and 3,500 generally; 95% of the research is generated internally.

Clients include Kodak, Unisys, Bell Atlantic and Stanford University.

Barr Rosenberg, managing general partner, is the chief investment officer; Marlis S. Fritz, partner and director of marketing, is the client contact.

## The Rothschild Co.

32 South St., Baltimore, Md. 21202; (301) 539-4660

| | |
|---|---|
| Total assets managed | $800,000,000 |
| Tax-exempt assets managed | $400,000,000 |
| International assets managed | $20,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 67 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

The Rothschild Co. is an equity, balanced and convertible securities manager.

Its equity approach is value-oriented with a bias toward growth. Graham & Dodd principles are used.

Its fixed-income approach uses interest rate anticipation.

Stock index futures are used.

The firm follows 200 stocks closely and 300 generally; 50% of the research is generated internally.

The parent company is United Asset Management.

Clients include NADA, Johns Hopkins Applied Physics Lab and Alton James Foundation.

Stanford Z. Rothschild Jr., president, is the chief investment officer and client contact.

## N.M. Rothschild International Asset Management Ltd.

Five Arrows House, St. Swithin's Lane, London EC4N 8NR, U.K.; 01-280-5000

| | |
|---|---|
| Total assets managed | $2,547,000,000 |
| Tax-exempt assets managed | $1,420,000,000 |
| International assets managed | $1,420,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 11 |
| Types of accounts managed | CG |
| No. of portfolio managers | 16 |

N.M. Rothschild International Asset Management Ltd. is an international manager.

Its equity approach seeks to add value in market, stock and currency selection. Concentrated and active asset allocation and market selection are stressed through fundamental economic analysis.

Its fixed-income approach is market rotation, using interest rate anticipation and currency and instrument management. Value is added through maturity, yield curve and market switches.

The asset mix Jan. 1 was 40% stocks and 60% bonds.

The parent company is N.M. Rothschild Asset Management (Holding) Ltd.

Clients include Pacific Telesis, American Airlines, GM and Massachusetts PRIM.

*The Creation of Extraordinary Value is the Result of Extraordinary Vision*

- - the Rembrandt Philosophy

A profitable investment portfolio, like the great artist's work on canvas, is rarely the consequence of whim or chance. At Tomlin Properties, we have that extraordinary vision to create extraordinary value with exceptional returns through 17 years of investing in Predevelopment Land.

**"Heaven forbid that I should ever see things the way they do!"**

Rembrandt worked to see what few around him saw. And he created masterpieces. At Tomlin Properties, we've cultivated an approach that looks beyond what "conventional wisdom" might suggest. While some view land as risky business, we've created an approach that proves this is a bit short sighted. With over eighty investments in predevelopment land, *we've proven that predevelopment land is a prudent investment.*

**"Secret . . . fiddlesticks! I start with a formula, and work to prove that it is correct."**

Don't misunderstand. When we speak of "vision" we're not referring to some nebulous "feeling" we get about a parcel of land. The Tomlin formula is based on *detailed research, intensive management* and *hard work.* That experience has been the cornerstone of our success. With a keen eye on the nation's prime growth markets, we begin with the parameters of a cautious investment clearly in focus: location of the land, and timing of the acquisition. Assessed correctly, these are the factors which *minimize risk* and maximize return. Additionally, we only invest in those cities where we have *on-site local management* offices. *Dallas, Los Angeles, Houston, Atlanta, Phoenix and Washington, D.C.* Local Tomlin executives who know the market and who know how to maximize each property's potential. Time and time again our clients have enjoyed the fruits of this approach.

**"Perhaps 400 years from now, if any of my pictures are left, they will say, 'this fellow was going in the right direction'."**

Rembrandt knew that time was the ultimate test of the value of his art. Fortunately we're not looking at a 400 year waiting period. Instead, our average investment period is much shorter than you might expect. History tells us that land has been profitable for the patient sophisticated investor. And while not all land is suitable for capital growth investments, we live in a world where predevelopment land in ideal locations is a diminishing resource. Its appreciation potential is great, while the measured risks are comparable to the most traditionally conservative portfolio components. And Tomlin investments in predevelopment land continually outperform other forms of real estate, stocks, bonds, and treasury bills. *Our clients agree — we've passed the test of time. And the result is extraordinary value.*

TOMLIN PROPERTIES, INC.
George M. Dishman, Partner
214/239-8041
5001 Spring Valley Rd., Ste. 1000E. LB10
Dallas, Texas 75244
Tlx: 735085 TOMPROP VD. Fax: 7029786


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Richard Katz is chief investment officer; Peter Flynn is client contact at (212) 757-6000.

### Roulston & Co. Inc.

4000 Chester Ave., Cleveland, Ohio 44103; (216) 431-3000

| | |
|---|---|
| Total assets managed | $500,000,000 |
| Tax-exempt assets managed | $200,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 200 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 7 |
| Size of research staff | 30 |

Roulston & Co. Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses fundamental research to purchase growth, emerging growth and low p/e stocks.

Its fixed-income approach uses interest rate anticipation.

The firm follows 250 stocks closely and 250 generally; 90% of the research is generated internally.

Clients include Ohio Edison and Sunar Hauserman.

Jerry Dombcik is the chief investment officer; Thomas H. Roulston is the client contact.

### RREEF

650 California St., San Francisco, Calif. 94108; (415) 781-3300

| | |
|---|---|
| Total assets managed | $3,447,000,000 |
| Tax-exempt assets managed | $3,044,000,000 |
| Real estate assets managed | $3,044,000,000 |
| Minimum separate account | $100,000,000 |
| Tax-exempt clients | 86 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 4 |
| Size of research staff | 4 |

RREEF is a real estate manager.

RREEF purchases high-quality office, retail, industrial and multi-household residential properties nationwide. Emphasis is on equity and intensive management of the assets.

All assets were in equity real estate Jan. 1.

The firm generates all of its research internally.

Clients include AT&T, Xerox and Illinois State Universities.

Stanislaw Maliszewski, principal, is the client contact.

### Ruane, Cunniff & Co. Inc.

1370 Avenue of the Americas, New York, N.Y. 10019; (212) 245-4500

| | |
|---|---|
| Total assets managed | $1,406,000,000 |
| Tax-exempt assets managed | $820,000,000 |
| Tax-exempt clients | 45 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 3 |
| Size of research staff | 3 |

Ruane, Cunniff & Co. Inc. is an equity manager.

Its equity approach emphasizes Graham & Dodd analysis. Its fixed-income approach is passive.

The asset mix Jan. 1 was 38% stocks and 62% cash.

The firm follows 100 stocks closely and 300 generally; all research is generated internally.

William J. Ruane is the chief investment officer.

### Frank Russell Trust Co.

1201 Pacific Ave., Tacoma, Wash. 98402; (206) 572-2282

Frank Russell Trust Co. is a manager of managers, offering 10 pooled funds. It has $5.145 billion in assets managed on its behalf by external managers; $2.911 billion is in commingled accounts for 165 clients and $2.234 billion in separate accounts for two clients.

The equity funds employ earnings growth, market oriented and price driven styles. Other funds concentrate on market timing, emerging and aggressive growth, and small-capitalization issues.

It has three international funds, a broadly diversified non-U.S. fund, a Pacific Basin fund and an emerging markets fund.

Its fixed-income approach comprises long- and short-term anchors with a discretionary core.

Seven pooled real estate funds are used, diversified by property, value range, geography, investment structuring, lease maturities and manager style.

The parent is Frank Russell Co.

Clients include United Airlines Pilots, Idaho Employees, Chesebrough-Pond's and The New York Times.

Michael C. Malone, vice president, is chief investment officer; Virginia P. Sirusas, senior vice president, is client contact.

### RXR Capital Management

30 Buxton Farm Road, Stamford, Conn. 06905; (203) 323-5015

| | |
|---|---|
| Total assets managed | $300,000,000 |
| Tax-exempt assets managed | $12,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 1 |
| Types of accounts managed | G |
| No. of portfolio managers | 4 |
| Size of research staff | 8 |

RXR Capital Management is an equity, fixed-income and balanced manager.

Its equity approach uses options and futures to enhance yield and reduce volatility on indexed portfolios.

Its fixed-income approach uses portfolios of long government bonds hedged with options and futures to enhance yield, reduce volatility and protect principal.

The parent is The RXR Group.

Kenneth Stocker, executive vice president, is chief investment officer and client contact.

S

### Sabi Associates

2444 Wilshire Blvd., Suite 500, Santa Monica, Calif. 90403; (213) 828-4240

| | |
|---|---|
| Total assets managed | $44,000,000 |
| Tax-exempt assets managed | $14,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 15 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |

Sabi Associates is an equity and balanced manager.

In equities, it uses Graham & Dodd analysis with a growth stock approach to balance for long-term performance.

The fixed-income approach is based on interest rate anticipation.

It follows 75 stocks closely and 150 generally; 30% of research is generated internally.

Frederick M. Sabi is chief investment officer; Ralph E. Weil is client contact.

### Ronald Sadoff's Major Trends

250 W. Coventry Court, Milwaukee, Wis. 53217; (414) 352-8460

| | |
|---|---|
| Total assets managed | $85,000,000 |
| Tax-exempt assets managed | $53,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 51 |
| Types of accounts managed | CF |
| No. of portfolio managers | 1 |

Ronald Sadoff's Major Trends is an equity, fixed-income and balanced manager.

Its equity approach combines Graham & Dodd analysis with growth, emerging growth and low p/e stocks. Its low-risk/high-potential, top-down approach focuses on leading industries and companies emerging from long-term downtrends that possess value and growth potential.

Its fixed-income approach is top-down plus interest rate anticipation and credit analysis.

Ronald Sadoff is the chief investment officer and the client contact.

### SAFECO Asset Management

SAFECO Plaza, T-14, Seattle, Wash. 98185; (206) 545-5727

| | |
|---|---|
| Total assets managed | $484,000,000 |
| Tax-exempt assets managed | $484,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | CFJ |
| No. of portfolio managers | 4 |
| Size of research staff | 7 |

SAFECO Asset Management is an equity, fixed-income and balanced manager.

Its equity approach employs low p/e stocks, sector rotation and Graham & Dodd analysis.

Its fixed-income approach is based on interest rate anticipation.

The firm follows 200 stocks closely and 300 generally; 75% of the research is generated internally.

The parent company is SAFECO Corp.

Richard W. Hubbard and Eugene D. Holen are the chief investment officers. Mr. Holen, vice president, is the client contact.

### San Diego Financial Capital Management Inc.

530 Broadway, Suite 804, San Diego, Calif. 92101; (619) 557-3100

| | |
|---|---|
| Total assets managed | $280,000,000 |
| Tax-exempt assets managed | $140,000,000 |
| Real estate assets managed | $7,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 26 |
| Types of accounts managed | CFJ |
| No. of portfolio managers | 6 |

San Diego Financial Capital Management Inc. is an equity, fixed-income, balanced and cash manager.

Its equity approach emphasizes industry diversification, strong financials, consistent earnings growth and numerous relative valuation measures.

Its fixed-income approach uses active management to obtain high rewards with minimum risk through smooth maturity ladders.

The parent company is San Diego Financial Corp.

Gerald C. Wagner, president and chief executive officer, is the chief investment officer; Tamara O'Brien, vice president-marketing, is the client contact.

### Sanwa Bank California

612 S. Flower St., Los Angeles, Calif. 90017; (213) 613-2197

| | |
|---|---|
| Total assets managed | $237,000,000 |
| Tax-exempt assets managed: | |
| Total | $222,000,000 |
| Commingled | $70,000,000 |
| Separate | $152,000,000 |
| Real estate assets managed | $2,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients: | |
| Separate | 90 |
| Types of accounts managed | CFJ |
| No. of portfolio managers | 5 |

Sanwa Bank California is an equity, fixed-income, balanced and real estate manager.

Its equity approach emphasizes companies with the most rapid and consistent earnings and dividend growth.

Its active fixed-income approach incorporates change in weighted average maturity, interest rate anticipation and sector shift.

The parent company is Sanwa Bank Ltd.

John Thompson is the chief investment officer; Jackie Vaughan is the client contact.

### Fayez Sarofim & Co.

2 Houston Center, Suite 2907, Houston, Texas 77010; (713) 654-4484

| | |
|---|---|
| Total assets managed | $10,542,000,000 |
| Tax-exempt assets managed | $9,160,000,000 |
| 401(k)/457 assets managed | $226,000,000 |
| 401(k)/457 clients | 89 |
| Real estate assets managed | $101,000,000 |
| Tax-exempt clients | 396 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 13 |
| Size of research staff | 7 |

Fayez Sarofim & Co. is an equity, fixed-income, balanced and real estate manager.

Its equity approach focuses on value and growth. Fundamental economic and company analysis are the foundation of a top-down, flexible process. Current emphasis is on larger-cap companies with highly predictable earnings growth and market multiple.

Its fixed-income approach is keyed to timely shifts in maturity as dictated by interest rate outlook and subject to specified minimum return objectives.


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Its real estate approach focuses on quality real estate using a participating mortgage structure.

The asset mix Jan. 1 was 75% stocks, 19% bonds, 5% cash and 1% equity real estate.

It follows 60 stocks closely and 300 generally; 80% of research is generated internally.

Clients include Amoco, Ford Motor Co., William Marsh Rice University Endowment and Rockwell International.

Fayez Sarofim, chairman, is chief investment officer; William K. McGee Jr. is client contact.

### Sasco Capital Inc.

10 Sasco Hill Road, Fairfield, Conn. 06430; (203) 254-6800

| | |
|---|---|
| Total assets managed | $600,000,000 |
| Tax-exempt assets managed | $600,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 7 |
| Types of accounts managed | CF |
| No. of portfolio managers | 4 |
| Size of research staff | 1 |

Sasco Capital Inc. is an equity manager.

Its equity approach is contrarian with a value discipline. It capitalizes on market inefficiencies by focusing on financial underachievers that will benefit from asset redeployment.

All tax-exempt assets Jan. 1 were in stocks.

The firm follows 40 stocks closely and 150 generally; all research is generated internally.

Clients include IBM, General Dynamics, Safeway and AMP.

Lee C. Garcia, managing director, is the chief investment officer; Daniel Sullivan, managing director, is the client contact.

### M.D. Sass Investor Services

1133 Avenue of the Americas, New York, N.Y. 10036; (212) 730-2000

| | |
|---|---|
| Total assets managed | $2,751,000,000 |
| Tax-exempt assets managed | $2,354,000,000 |
| Real estate assets managed | $405,000,000 |
| International assets managed | $8,000,000 |
| Dedicated funds managed | $107,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 116 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 14 |

M.D. Sass Investor Services Inc. is an equity, fixed-income, balanced and dividend capture manager.

Its equity approach combines market timing/tactical asset allocation with sector rotation, quantitative methods and value-oriented strategies. The firm adds value by emphasizing secular trends and stocks selling below private business value and about to experience unexpected earnings growth. Specialized risk arbitrage strategies are provided.

Its fixed-income approach uses sector analysis and features active use of options and futures to reduce risk. Five distinct duration portfolios are offered.

Portfolio insurance is provided to seven clients covering $104 million.

The asset mix Jan. 1 was 38% stocks, 55% bonds and 7% cash; $405 million was in mortgage-backed securities and $8 million in foreign stocks.

Clients include Uniformed Fire Officers Association, Kansas City Firefighters and Keebler.

Martin D. Sass, president, is chief investment officer; Thomas J. Mackell Jr., senior vice president, is client contact.

### La Sauvegarde Compagnie d'assurance sur la vie

1 Complexe Desjardins, Montreal, Quebec H5B 1E2; (514) 285-7700

| | |
|---|---|
| Total assets managed | $545,000,000 |
| Tax-exempt assets managed: | |
| Total | $185,000,000 |
| For subsidiaries of U.S. firms | $0 |
| Real estate assets managed | $8,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 4 |
| Types of accounts managed | C |
| No. of portfolio managers | 4 |

La Sauvegarde Compagnie d'assurance sur la vie, a Canadian firm, is an equity, fixed-income, balanced and mortgage manager.

Its equity approach emphasizes market timing/tactical asset allocation and sector rotation. Its fixed-income combines interest rate anticipation and sector analysis, with emphasis given to the former.

Gerard Bouvier is chief investment officer; Alain Bedard, director-group pensions, is client contact.

### SBC Portfolio Management International Inc.

1 World Trade Center, Suite 9051, New York, N.Y. 10048; (212) 938-7465

| | |
|---|---|
| Total assets managed | $410,000,000 |
| Tax-exempt assets managed | $283,000,000 |
| International assets managed | $283,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 16 |
| Types of accounts managed | C |
| No. of portfolio managers | 5 |
| Size of research staff | 56 |

SBC Portfolio Management International Inc. is an international manager.

Its global top-down equity approach emphasizes aggressive country allocations. It uses daily currency risk management and favors low p/e and value when market liquidity permits.

Its fixed-income approach uses interest rate anticipation.

The firm follows 100 stocks closely and 250 generally; 80% of the research is generated internally.

The parent company is Swiss Bank Corp.

Clients include Lockheed, TWA, Upjohn and Whirlpool.

Peter J. Morant, managing director, is the chief investment officer; John W. Conlin, marketing director, is the client contact.

### Sceptre Investment Counsel

26 Wellington St. E., Suite 1200, Toronto, Ontario M5E 1W4; (416) 367-9898

| | |
|---|---|
| Total assets managed | $2,772,000,000 |
| Tax-exempt assets managed: | |
| Total | $2,410,000,000 |
| For subsidiaries of U.S. firms | $900,000,000 |
| Real estate assets managed | $25,000,000 |
| Non-North American assets | $58,000,000 |
| Minimum separate account | $19,000,000 |
| Tax-exempt clients | 74 |
| U.S. subsidiaries | 25 |
| Types of accounts managed | CEFGU |
| No. of portfolio managers | 10 |

Sceptre Investment Counsel Ltd., a Canadian firm, is an equity, fixed-income and balanced manager.

Its equity approach uses Graham & Dodd analysis to identify growth, emerging growth and low p/e stocks. Its fixed-income approach uses sector analysis.

The asset mix Jan. 1 was 34% Canadian stocks, 13% U.S. stocks, 43% bonds, 9% cash and 1% mortgages.

It follows 350 stocks closely and 450, generally; 50% of research is generated internally.

J. Douglas Grant, chairman, is chief investment officer; George B. Turnbull is client contact.

### Schaenen Wood & Associates Inc.

654 Madison Ave., New York, N.Y. 10021; (212) 319-3666

| | |
|---|---|
| Total assets managed | $210,000,000 |
| Tax-exempt assets managed | $145,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 40 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 3 |

Schaenen Wood & Associates Inc. is an equity, fixed-income, balanced and convertible securities manager.

Its equity approach is capital preservation, stressing value and sell disciplines. Selection is through proprietary computer screening techniques. Convertible bonds are used extensively.

Its fixed-income approach uses interest rate anticipation and sector analysis. Where appropriate, some convertible securities are used.

Clients include Unocal, Louisville Police, AVX and Concord Academy.

Gary W. Wood, president, is chief investment officer and client contact.

### Schield Management Co. Timing Service

390 Union Blvd. Suite 410, Denver, Colo. 80228; (303) 985-9999

| | |
|---|---|
| Total assets managed | $88,000,000 |

**Managers of managers***

| Firm | $ millions |
|---|---|
| The Common Fund | 6,700 |
| Frank Russell Trust | 5,145 |
| Lincoln Nat'l Pension | 5,082 |
| Vanguard Group | 4,700 |
| Collins Associates | 150 |
| Abel-Noser | 30 |
| **Total** | **21,807** |

*ranked by tax-exempt assets directed to other firms

**Options overwriters***

| Firm | $ millions |
|---|---|
| Balch Hardy Scheinman | 2,000 |
| Rampart | 100 |
| Leland O'Brien | N/A |

*tax-exempt assets in specific option overwriting/portfolio insurance accounts, but not including management of the underlying assets.

| | |
|---|---|
| Tax-exempt assets managed | $13,000,000 |
| Minimum separate account | $10,000 |
| Tax-exempt clients | 58 |
| Types of accounts managed | CJ |
| No. of portfolio managers | 1 |
| Size of research staff | 3 |

Schield Management Co., a market risk manager, uses timing to reduce the risk of owning a mutual fund by preserving gains that might deteriorate in a declining market. Conversely, the portfolio is repositioned when the market returns to an upward position.

The firm follows 100 stocks closely and 4,000, generally; all research is generated internally.

The parent company is Schield Management Co.

Marshall L. Schield is chief investment officer; Karen Oliver, vice president-public relations, is client contact.

### Schield Portfolios Series

390 Union Blvd. Suite 410, Denver, Colo. 80228; (303) 985-9999

| | |
|---|---|
| Total assets managed | $7,000,000 |
| Tax-exempt assets managed | $1,000,000 |
| Types of accounts managed | CE |
| No. of portfolio managers | 4 |

Schield Portfolio Series offers equity, fixed-income and balanced manager, using systematic risk management with a hedge strategy.

Its equity approach seeks to create capital gains potential; its fixed-income approach seeks to achieve the highest possible current income. In both, it seeks to shift capital during downward trends and maximize participation during upward swings. Options and stock index futures and fixed-income futures are used.

The parent company is Schield Management Co.

Marshall L. Schield is chief investment officer; Karen Oliver, vice president-communications, is client contact.

### A.R. Schmeidler & Co. Inc.

555 Fifth Ave., New York, N.Y. 10017; (212) 687-9800

| | |
|---|---|
| Total assets managed | $206,000,000 |
| Tax-exempt assets managed | $58,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 68 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 5 |
| Size of research staff | 3 |

A.R. Schmeidler & Co. Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses market timing and Graham & Dodd analysis to purchase the most assets with greatest cash flow for the fewest dollars in sectors that appear most timely on the basis of macroeconomic decisions.

Its fixed-income approach uses interest rate anticipation and business cycle analysis as a basis for macroeconomic decisions.

Arnold R. Schmeidler, president, is the chief investment officer; Linda S. Kandel, account administrator, is the client contact.

### Schroder Capital Management International

787 Seventh Ave., New York, N.Y. 10019; (212) 841-3838

| | |
|---|---|
| Total assets managed | $2,000,000,000 |
| Tax-exempt assets managed | $1,600,000,000 |
| International assets managed | $1,400,000,000 |
| Index funds managed | $200,000,000 |
| Minimum separate account | $15,000,000 |
| Tax-exempt clients | 33 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 6 |
| Size of research staff | 60 |

Schroder Capital Management International Inc., an international manager, has an equity bias. Its approach begins with country allocation based on two-year economic projections. Within each country, the focus is on emerging growth stocks. Fixed-income is used as a limited tactical alternative.

The asset mix Jan. 1 was 80% stocks, 13% bonds and 7% cash. As of the same date, the firm had $200 million in bond indexed funds.

The firm follows 250 stocks closely and 800 generally; 80% of research is generated internally.

The parent company is Schroders PLC.

Clients include GM, 3M, United Technologies and Cornell University.

Richard Foulkes, executive vice president, is chief investment officer; Sharon L. Haugh, senior vice president, is client contact.

### Schroder Real Estate Associates

437 Madison Ave., New York, N.Y. 10022; (212) 486-9800

| | |
|---|---|
| Total assets managed | $1,300,000,000 |
| Tax-exempt assets managed | $300,000,000 |
| Real estate assets managed | $300,000,000 |
| Minimum separate account | $50,000,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | CG |
| No. of portfolio managers | 2 |

Schroder Real Estate Associates, a real estate manager, acquires underperforming or underused properties that will respond to its direct, intense property and construction management. Properties are sold upon creation of their optimum incremental value.

Clients include General Foods, 3M, Eastman Kodak and Ohio Police & Fire.

Norman L. Peck, managing director, is chief investment officer; John E. Emmanuel, senior vice president, is client contact.

### Scudder, Stevens & Clark

345 Park Ave., New York, N.Y. 10154; (212) 326-6200

| | |
|---|---|
| Total assets managed | $36,738,000,000 |
| Tax-exempt assets managed | $10,495,000,000 |
| 401(k)/457 assets managed | $200,000,000 |
| 401(k)/457 clients | 160 |
| Real estate assets managed | $897,000,000 |
| International assets managed | $1,819,000,000 |
| Dedicated funds managed | $242,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 623 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 94 |
| Size of research staff | 51 |

Scudder, Stevens & Clark is an equity, fixed-income, balanced, international and mutual funds manager.

Its equity approach is value-oriented, emphasizing emerging growth stocks. Fundamental research, identification of long-term change and global perspective provide substantial opportunities for portfolio management at low risk.

Its fixed-income approach is characterized by original and close interaction between managers and the market; interest rate projections and opportunity/risk profiles are critical.

Options, stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 21% stocks, 50% bonds, 20% cash and 9% mortgage-backed securities. As of the same date, the firm $1.5 billion in foreign stocks, $288 million in foreign bonds and $6 million in foreign cash.

Douglas M. Loudon is chief investment officer-equities; Lynn S. Birdsong is chief investment officer-fixed-income. Victoria J. Herget, principal, and Emily L. Smith, vice president, are client contacts.

### Seaboard Investment Advisers

100 Seaboard Center, 235 Plume St., Norfolk, Va. 23510; (804) 622-0123

| | |
|---|---|
| Total assets managed | $83,000,000 |
| Tax-exempt assets managed | $48,000,000 |
| Real estate assets managed | $4,000,000 |
| International assets managed | $5,000,000 |
| Minimum separate account | $750,000 |
| Tax-exempt clients | 40 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

Seaboard Investment Advisers is an equity, fixed-income, balanced and international manager.

Its equity approach uses macroeconomic trend analysis to determine asset allocation and, combined with cyclical analysis, identify appropriate sector exposures.

Its fixed-income approach stresses absolute, positive return that is enhanced through sector exposure, yield-curve analysis and duration management.

Options are used.

Eugene W. Hansen is the chief investment officer; Stewart M. Powers Jr. is the client contact.

### Sears Investment Management Co.

55 W. Monroe St., 32nd Floor, Chicago, Ill. 60603; (312) 875-0415

| | |
|---|---|
| Total assets managed | $4,742,000,000 |
| Tax-exempt assets managed | $4,742,000,000 |
| Real estate assets managed | $45,000,000 |
| International assets managed | $203,000,000 |
| Index funds managed | $1,225,000,000 |
| Tax-exempt clients | 1 |
| Types of accounts managed | C |
| No. of portfolio managers | 4 |
| Size of research staff | 8 |

Sears Investment Management Co. is an equity, fixed-income, balanced and venture capital manager.

Its equity approach is passive, focusing on emerging growth and growth stocks for investment; foreign equities are used.

Its fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 41% stocks, 30% bonds, 22% cash, 1% equity real estate and 6% venture/international.

It follows 300 stocks closely; 50% of research is generated internally.

Its client, Sears Roebuck & Co., is the parent company.

David V. Dootson is chief investment officer.

### Seattle-First National Bank

P.O. Box 3586, Seattle, Wash. 98124; (206) 358-3246

| | |
|---|---|
| Total assets managed | $2,836,000,000 |
| Tax-exempt assets managed: | |
| Total | $827,000,000 |
| Commingled | $281,000,000 |
| Separate | $346,000,000 |
| Real estate assets managed | $51,000,000 |
| International assets managed | $8,000,000 |
| Indexed assets managed | $63,000,000 |
| Dedicated assets managed | $22,000,000 |
| Minimum separate account | $1,000,000 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 5 |
| Size of research staff | 6 |

Seattle-First National Bank is an equity, fixed-income, balanced and real estate manager.

Its equity approach is value-oriented with sector bias.

Its fixed-income approach uses sector analysis and interest rate anticipation.

Its real estate approach is to preserve capital, achieve long-term capital growth, maintain an inflation-adjusted income stream and earn high current income when compatible with previous objectives.

The asset mix Jan. 1 was 15% stocks, 61% bonds, 16% cash, 1% equity real estate and 7% mortgage-backed securities. As of the same date, it had $1 million in mortgages, $8 million in foreign bonds and $63 million in bond index funds.

The parent company is BankAmerica.

John Privat, vice president and manager-securities management, is the chief investment officer; Elizabeth Romney, vice president-sales, is the client contact.

### Second National Bank of Hamilton, Ohio

High Street & Journal Square, Hamilton, Ohio 45011; (513) 867-5134

| | |
|---|---|
| Total assets managed | $250,000,000 |

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Tax-exempt assets managed:
Total ..... $94,000,000
Separate ..... $94,000,000
Real estate assets managed ..... $5,000,000
International assets managed .... $1,500,000
Tax-exempt clients:
Separate ..... 430
Types of accounts managed ..... CEF
No. of portfolio managers ..... 1
Size of research staff ..... 1

Second National Bank of Hamilton, Ohio is an equity, fixed-income, balanced and international manager.

Its equity approach is value-oriented complemented with market-timed, no-load mutual funds and an aggressive growth stock portfolio.

Its fixed-income approach uses interest rate anticipation and sector analysis.

It uses options and stock index futures.

The parent company is First National Cincinnati Corp.

Joe Belew, trust officer, is the chief investment officer; Bill Groth is the client contact.

## Second National Bank of Richmond

P.O. Box 818, Richmond, Ind. 47375; (317) 983-2395

Total assets managed ..... $208,000,000
Tax-exempt assets managed:
Total ..... $34,000,000
Separate ..... $34,000,000
Minimum separate account ..... $500,000
Tax-exempt clients ..... 140
Types of accounts managed ..... CFG
No. of portfolio managers ..... 3
Size of research staff ..... 1

Second National Bank of Richmond is an equity, fixed-income and balanced manager.

Its value-oriented, Graham & Dodd equity approach concentrates on historic ranges for stock prices based upon sales and cash-flow ratios.

Its fixed-income approach uses interest rate anticipation.

The parent company is First National Cincinnati Corp.

Eric D. Martz is chief investment officer; Kim R. Kemper, employee benefits officer, is client contact.

## Securities Counsel Inc.

211 S. Rose St., P.O. Box 4034, Kalamazoo, Mich. 49007; (616) 383-9200

Total assets managed ..... $1,720,000,000
Tax-exempt assets managed ... $897,000,000
401(k)/457 assets managed ..... $12,000,000
401(k)/457 clients ..... 2
Minimum separate account ..... $3,000,000
Tax-exempt clients ..... 94
Types of accounts managed ..... CEFG
No. of portfolio managers ..... 9

Securities Counsel Inc. is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented, ranking and selecting equities displaying strong underlying value, favorable historic growth and profitability and high expectations for future earnings estimate trends.

Its fixed-income approach focuses on interest rate cycle analysis and fundamental and technical forces affecting interest rates as well as relative value of a security at a given time.

The asset mix Jan. 1 was 42% stocks, 39% bonds and 19% cash.

The parent company is First of America Bank Corp.

Clients include Herman Miller, Walgreen, Highland Superstores and Houston Employees.

J. Russell Leonard, president and chief executive officer, is chief investment officer; Elyse Goldin Essick, vice president, is client contact.

## Securities Counselors of Iowa Inc.

200 Second Ave. SE, Cedar Rapids, Iowa 52406; (800) 553-5465

Total assets managed ..... $451,000,000
Tax-exempt assets managed ... $277,000,000
Minimum separate account ..... $500,000
Tax-exempt clients ..... 364
Types of accounts managed ..... CEF
No. of portfolio managers ..... 8
Size of research staff ..... 6

Securities Counselors of Iowa Inc. is an equity, fixed-income and balanced manager.

Its equity approach combines growth and low p/e stocks, sector rotation and quantitative methods and emphasizes balance-sheet quality.

Its fixed-income approach is based on interest rate anticipation and stresses active management of the portfolios' primary characteristics: credit, quality, maturity distribution, coupon, sector allocation, issue selection and diversification.

Stock index futures are used.

The parent company is SCI Financial Group Inc.

Clients include Comdisco, Farmland Industries, Teleconnect and National Manufacturing.

James W. Paulsen, president and chief operating officer, is chief investment officer; Mary B. McManus, managing director, is client contact.

## Security Capital Management Inc.

70 Seaview Ave., Stamford, Conn. 06902; (203) 964-9411

Total assets managed ..... $546,000,000
Tax-exempt assets managed ... $546,000,000
Real estate assets managed ..... $11,000,000
Index funds managed ..... $405,000,000
Dedicated funds managed .... $130,000,000
Minimum separate account ..... $10,000,000
Tax-exempt clients ..... 12
Types of accounts managed ..... CFG
No. of portfolio managers ..... 2

Security Capital Management Inc. is a fixed-income manager.

Its fixed-income eapproach matches the duration of a client-designated benchmark and provides incremental return by exploiting the misvaluations in the fixed-income option and futures markets.

Opticns and fixed-income futures are used.

The asset mix Jan. 1 was 90% bonds and 10% cash. As of the same date, the firm had $11 million in mortgage-backed securities.

Clients include GTE, Hospital Corporation of America, Rockefeller Foundation and Virginia Retirement System.

Robert C. Brewer and Jon B. Victor are chief investment officers and client contacts.

## Security Capital Real Estate

1290 Avenue of the Americas, New York, N.Y. 10104; (212) 408-2911

Total assets managed ..... $1,228,000,000
Tax-exempt assets managed .. $1,015,000,000
Real estate assets managed .... $916,000,000
Minimum separate account .... $100,000,000
Tax-exempt clients ..... 153
Types of accounts managed ..... CFG
No. of portfolio managers ..... 4

Security Capital Real Estate Corp., a real estate manager, takes a countercyclical approach, purchasing existing, proven income-producing properties with average cash yields of 8%. Internal, intensive property management is performed; properties are sold in three to five years.

The asset mix Jan. 1 was 82% equity real estate, 8% mortgages and 10% short-term investments.

Clients include Alaska, Ford and Dow Corning.

John Streicker, president, is chief investment officer; Lewis W. Kresch, senior vice president, is client contact.

## Security National Bank of Sioux City, Iowa

Sixth and Pierce, Sioux City, Iowa 51101; (712) 277-6892

Total assets managed ..... $283,000,000
Tax-exempt assets managed:
Total ..... $69,000,000
Commingled ..... $18,000,000
Separate ..... $51,000,000
Real estate assets managed ..... $3,000,000
Minimum separate account ..... $1,000,000
Tax-exempt clients:
Commingled ..... 132
Separate ..... 172
Types of accounts managed ..... CEF
No. of portfolio managers ..... 9
Size of research staff ..... 2

The Security National Bank of Sioux City, Iowa, is an equity, fixed-income and balanced manager.

Its equity approach is based on analysis of balance sheet and valuation data. Its fixed-income approach is to invest in specific maturity ranges according to the interest rate outlook.

Ann Earley, trust investment manager, is chief investment officer; Neil


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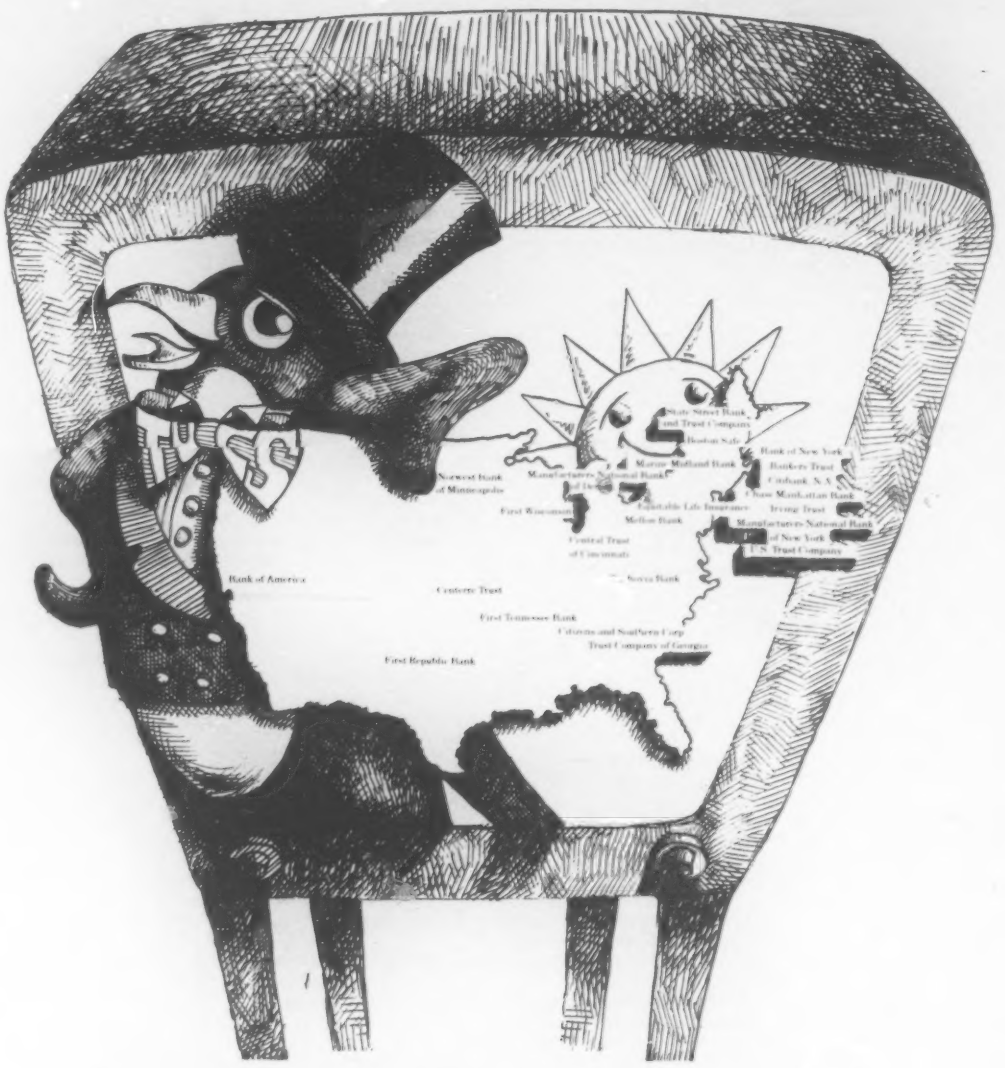


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Bartholomew, corporate trust administrator, is client contact.

## Security National Bank & Trust Co. of New Jersey

101 Eisenhower Parkway, Roseland, N.J. 07068; (201) 228-9770

| | |
|---|---|
| Total assets managed | $144,000,000 |
| Tax-exempt assets managed: | |
| Total | $126,000,000 |
| Separate | $126,000,000 |
| Real estate assets managed | $6,000,000 |
| International assets managed | $2,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 24 |
| Types of accounts managed | CF |
| No. of portfolio managers | 2 |

Security National Bank & Trust Co. of New Jersey is an equity, fixed-income and balanced manager.

Its value-oriented equity approach seeks stocks with low to moderate p/e and low beta that have strong balance sheets and good earnings prospects. Its fixed-income approach is passive. Options are used.

Lee T. Smith Jr., executive vice president, is chief investment officer; Joseph J. Verbaro Jr., senior vice president, is client contact.

## Security Pacific Investment Managers Inc.

300 S. Grand Ave., Suite 2200, Los Angeles, Calif. 90071; (213) 229-1300

| | |
|---|---|
| Total assets managed | $4,525,000,000 |
| Tax-exempt assets managed | $4,319,000,000 |
| Real estate assets managed | $219,000,000 |
| Dedicated funds managed | $375,000,000 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients | 33 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 9 |
| Size of research staff | 3 |

Security Pacific Investment Managers Inc. is an equity, fixed-income, balanced, real estate, futures and options, high-income investment and cash manager.

Its equity and fixed-income investment approaches contend underlying economic strengths and weaknesses drive the valuation and performance of the markets. A top-down process defines its position in the economic cycle and helps it to capitalize on investment insights through sector rotation and security selection.

In real estate it actively manages an open-end commingled fund using high-quality debt-related instruments.

The asset mix Jan. 1 was 31% stocks, 39% bonds, 22% cash, 4% mortgage-backed securities, 1% mortgages and 3% real estate debt.

At the same date, there was $44 million in mortgages and $260,000 in foreign stocks.

Options, stock index futures and fixed-income futures are used.

The parent company is Security Pacific Corp.

J. Michael Gaffney is chief investment officer-fixed income; Robert U. Sandroni is chief investment officer-equities. Joseph Briggs, senior vice president, is client contact.

## The Alan G. Seidner Co.

P.O. Box 60510, Pasadena, Calif. 91106; (818) 795-2251

| | |
|---|---|
| Total assets managed | $806,000,000 |
| Tax-exempt assets managed | $219,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 12 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 3 |
| Size of research staff | 1 |

The Alan G. Seidner Co., a fixed-income manager, seeks the best relative values based on yield spread and yield curve analysis.

All tax-exempt assets were in fixed-income vehicles Jan. 1.

Clients include Presbyterian Intercommunity Hospital, Campus Crusade for Christ International, Episcopal Church of Our Saviour and Hemet Valley Hospital District.

Alan G. Seidner, president, and Carol Neuhar, vice president-portfolio manager, are chief investment officers; Sandee Sheek, vice president-client development, is client contact.

Leasing: Oct. 3.

## Selected Financial Service

1331 Euclid Ave., Cleveland, Ohio 44115; (216) 574-8838

| | |
|---|---|
| Total assets managed | $513,000,000 |
| Tax-exempt assets managed | $282,000,000 |
| Real estate assets managed | $16,000,000 |
| Minimum separate account | $1,000,000 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 9 |

Selected Financial Services Inc. is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented, focusing on low p/e stocks.

The firm follows 225 stocks closely.

The parent company is Prescott Ball & Turben.

Clients include Cleveland Builders Supply and American Bar Association.

Peggy G. Beier, vice president of marketing, is the client contact.

## J & W Seligman & Co. Inc.

1 Bankers Trust Plaza, New York, N.Y. 10006; (212) 488-0212

| | |
|---|---|
| Total assets managed | $6,775,000,000 |
| Tax-exempt assets managed | $1,562,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 97 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 19 |
| Size of research staff | 10 |

J & W Seligman & Co. Inc. is an equity, fixed-income and balanced manager.

Its equity approach focuses on growth stocks in companies that are fundamentally strong and meet momentum-based price disciplines.

Its fixed-income approach is conservative and includes secular and interest rate trends and market indicators. The firm also has an equity-oriented high-yield approach and duration and liability matching fixed-income programs.

The asset mix Jan. 1 was 67% stocks, 23% bonds and 10% cash.

The firm follows 150 stocks closely and 300 generally; 90% of research is generated internally.

Clients include New York State Common, University of Oklahoma and Control Data.

Ronald T. Schroeder is chief investment officer; Michael J. Del Priore is client contact.

## Shearson Asset Management Inc.

2 World Trade Center, New York, N.Y. 10048; (212) 321-5313

| | |
|---|---|
| Total assets managed | $4,771,000,000 |
| Tax-exempt assets managed | $1,848,000,000 |
| Minimum separate account | $300,000 |
| Tax-exempt clients | 904 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 17 |
| Size of research staff | 1 |

Shearson Asset Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses fundamental analysis to assess earnings momentum, unrecognized value and the quality of management. Stocks should benefit from competitive advantage and dominant industry and economic trends. It focuses on well-capitalized companies with good relative value and price.

Its fixed-income approach is to invest in high-quality securities in issues or sectors undervalued on a relative basis.

The asset mix Jan. 1 was 45% stocks, 45% bonds and 10% cash.

The firm follows 150 stocks closely and 500, generally; 10% of the research is generated internally.

The parent is Shearson Lehman Hutton Inc., a unit of American Express.

Harry D. Cohen, president, is chief investment officer; Warren Bender, executive vice president, is client contact.

## Shearson Management Inc.

521 Fifth Ave. Suite 1401, New York, N.Y. 10175; (212) 759-8932

| | |
|---|---|
| Total assets managed | $233,000,000 |
| Tax-exempt assets managed | $71,000,000 |
| Minimum separate account | $200,000 |
| Tax-exempt clients | 109 |
| Types of accounts managed | CEG |
| No. of portfolio managers | 3 |

Shearson Management Inc., an equity manager, looks for "niche" growth companies with proven track records. Accounts usually are diversified in 10 positions. Its fixed-income approach is passive.

The firm follows 20 stocks closely and 40, generally; all research is generated internally.

The parent is Shearson Lehman Hutton Inc., a unit of American Express Co.

Leslie M. Pollack, chairman, is chief investment officer; William E. Lauer Jr., senior vice president, is client contact.

## Sheffield Investment Management Inc.

900 Circle 75 Parkway, Suite 750, Atlanta, Ga. 30339; (404) 953-1597

| | |
|---|---|
| Total assets managed | $18,000,000 |
| Tax-exempt assets managed | $16,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 38 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |

Sheffield Investment Management Inc., formerly Sheffield & Co. Inc., is an equity, fixed-income and balanced manager.

Its equity approach focuses on stocks with low p/e ratios, using screens to locate stocks selling at or below book value and having earnings growth potential of 20% annually.

Its fixed-income approach uses bonds to enhance cash flow and reduce volatility. Maturities are held to three to six years.

Roger Sheffield is chief investment officer and client contact.

## Shields Asset Management

709 Westchester Ave., White Plains, N.Y. 10604; (914) 684-6900

| | |
|---|---|
| Total assets managed | $3,400,000,000 |
| Tax-exempt assets managed | $3,400,000,000 |
| Real estate assets managed | $340,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 100 |
| Types of accounts managed | JG |
| No. of portfolio managers | 6 |
| Size of research staff | 6 |

Shields Asset Management is an equity, fixed-income and balanced manager.

Its equity approach uses economic and financial analysis and risk/reward assessments to determine sector concentration and industry/company selection. Portfolios are diversified among generally large, high-quality companies.

Its fixed-income approach is to make maturity and duration judgments based on anticipated interest rate changes and to capitalize on sector opportunities and shifts of yield curves and quality spreads.

The asset mix Jan. 1 was 30% stocks, 45% bonds, 15% cash and 10% mortgage-backed securities.

The firm follows 125 stocks closely and 500, generally; 80% of research is generated internally.

Kenneth Safian is chief investment officer; John R. Larkin, vice president, is client contact.

## Siebel Capital Management

80 E. Sir Francis Drake Blvd., Larkspur, Calif. 94939; (415) 461-3850

| | |
|---|---|
| Total assets managed | $1,946,000,000 |
| Tax-exempt assets managed | $1,420,000,000 |
| 401(k)/457 assets managed | $400,000 |
| 401(k)/457 clients | 1 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 77 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 8 |
| Size of research staff | 2 |

Siebel Capital Management Inc. is an equity, fixed-income, balanced and mutual fund manager.

Its equity approach is value-oriented, using low p/e growth stocks and sector rotation with market timing/tactical asset allocation.

Its fixed-income approach is duration management, using moderate market timing to follow the market.

The asset mix Jan. 1 was 82% stocks, 2% bonds and 16% cash.

The firm follows 75 stocks closely and more than 700 generally; 65% of the research is generated internally.

The parent company is Equitec Financial Group Inc.

Clients include Xerox, Oklahoma Teachers, Ohio State University and Connecticut.

Kenneth F. Siebel Jr., president, is the chief investment officer; Lawrence A. Mitchell, executive vice president, is the client contact.

## Signet Asset Management

7 N. 8th St., 1st Floor, Richmond, Va. 23219; (804) 771-7131

| | |
|---|---|
| Total assets managed | $350,000,000 |
| Tax-exempt assets managed | $350,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 40 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 3 |
| Size of research staff | 1 |

Signet Asset Management is an equity, fixed-income and balanced manager.

Its equity approach is risk-averse, incorporating a value-driven style that involves a continual and concurrent process of top-down economic analysis and quantitative stock valuation.

Its fixed-income approach is passive, with short- and intermediate-term bonds used in balanced accounts to provide stability.

The parent company is Signet Banking Corp.

W. Guy Williams, executive vice president, is the chief investment officer; James R. Eads, director of marketing, is the client contact.

## Signet Bank/Maryland

P.O. Box 17034, Baltimore, Md. 21203; (301) 332-5877

| | |
|---|---|
| Total assets managed | $595,000,000 |
| Tax-exempt assets managed: | |
| Total | $225,000,000 |
| Commingled | $12,000,000 |
| Separate | $213,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 45 |
| Separate | 206 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 7 |

Signet Bank/Maryland is an equity, fixed-income, balanced and GIC manager.

Its equity approach uses sector rotation and Graham & Dodd principles. Its top-down analysis combines quantitative stock valuation and qualitative computer modeling techniques.

Its fixed-income approach uses interest rate anticipation and sector analysis. High quality and maturities averaging less than 10 years are guides.

The parent company is Signet Banking Corp.

Guy Williams is the chief investment officer; Jay M. Neale II, vice president, is the client contact.

## Signet Trust Co.

P.O. Box 26311, Richmond, Va. 23260; (804) 771-7156

| | |
|---|---|
| Total assets managed | $650,000,000 |
| Tax-exempt assets managed: | |
| Total | $120,000,000 |
| Commingled | $120,000,000 |
| Tax-exempt clients: | |
| Commingled | 380 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 4 |
| Size of research staff | 1 |

Signet Trust Co. is an equity, fixed-income, balanced and pooled GIC manager.

Its equity approach is risk-averse, incorporating a value-driven style that involves a continual and concurrent process of top-down economic analysis and quantitative stock valuation.

Its fixed-income approach is passive, with short- and intermediate-term bonds used in balanced accounts to provide stability.

The parent company is Signet Banking Corp.

Charles B. Arrington, vice president, is the chief investment officer; Samuel R. Brent, vice president, is the client contact.

## Simms Capital Management

7 E. 76th St., New York, N.Y. 10021; (212) 861-2830

| | |
|---|---|
| Total assets managed | $409,000,000 |
| Tax-exempt assets managed | $43,000,000 |
| International assets managed | $12,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 5 |
| Types of accounts managed | CG |
| No. of portfolio managers | 5 |
| Size of research staff | 3 |

Simms Capital Management Ltd. is an equity, fixed-income, balanced and international/global manager.

Its equity approach is both top down and bottom up. Economic analysis is used country selection; accelerating earnings momentum and relative undervaluation are the criteria for stock selection. Options are used.

Its top-down fixed-income approach uses the firm's global bond valuation matrix. Real rates are compared after review of trend and cycle adjustments. Currency prospects are considered.

O. Calvin Puckett, president, is chief investment officer; Krista M. Woodall, director of marketing, is client contact.

## Simpson Capital Management Co.

1205 PSFS Building, Philadelphia, Pa. 19107; (215) 629-0162

| | |
|---|---|
| Total assets managed | $50,000,000 |
| Tax-exempt assets managed | $17,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 9 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |

Simpson Capital Management Co. is an equity, fixed-income and balanced manager.

Its equity approach is contrarian, using Graham & Dodd analysis and low p/e screens to identify growth and emerging growth stocks. Sector rotation and market timing are used.

Its fixed-income approach predominantly uses Treasuries in a process that controls maturity management through interest rate anticipation.

The firm follows 100 stocks closely and 300 generally; 85% of research is generated internally.

Allen J. Simpson, president, is chief investment officer and client contact.

## Sirach/Flinn, Elvins Capital Management

3323 One Union Square, Seattle, Wash. 98101; (206) 624-3800

| | |
|---|---|
| Total assets managed | $523,000,000 |
| Tax-exempt assets managed | $476,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 35 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 5 |
| Size of research staff | 1 |

Sirach/Flinn, Elvins Capital Management is an equity, fixed-income, balanced and GIC manager.

Its equity approach emphasizes growth stocks at a reasonable price. It uses active asset allocation of large- and medium-cap stocks to vary risk levels.

Its fixed-income approach is one of controlled active management based on interest rate forecasting. Duration is limited to plus or minus two years around a benchmark; portfolios hold 15 to 20 issues rated BAA or higher.

The firm follows 45 stocks closely and 100 generally; 30% of the research is generated internally.

Clients include Boeing, Rust-Oleum and Puget Sound University.

George B. Kauffman, principal, is the chief investment officer; Kenneth E. Carlson, principal, is the client contact.

## Sit Investment Associates

1714 First Bank Place West, 120 S. 6th St., Minneapolis, Minn. 55402; (612) 332-3223

| | |
|---|---|
| Total assets managed | $2,437,000,000 |
| Tax-exempt assets managed | $2,155,000,000 |
| Real estate assets managed | $42,000,000 |
| International assets managed | $85,000,000 |
| Minimum separate account | $15,000,000 |
| Tax-exempt clients | 20 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 5 |
| Size of research staff | 4 |

Sit Investment Associates Inc. is an equity, fixed-income and balanced manager.

Its equity approach is rotational, used in combination with 10% to 15% positions in smaller and medium-size growth companies. Separate emerging growth style products are available.

Its fixed-income approach is interes

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rate anticipation rotated with short and long duration, stable return products. Fixed-income futures are used.

The asset mix Jan. 1 was 87% stocks, 4% bonds, 7% cash and 2% mortgage-backed securities. As of the same date, the firm had $85 million in foreign stocks.

The firm follows 200 stocks closely and 500 generally; 60% of research is generated internally.

Eugene C. Sit, president and chief executive officer, is chief investment officer; Peter L. Mitchelson, executive vice president, is client contact.

### Skye Investment Advisors

20370 Town Center Lane, Suite 255, Cupertino, Calif. 95014; (408) 446-4471

| | |
|---|---|
| Total assets managed | $1,459,000,000 |
| Tax-exempt assets managed | $646,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | CF |
| No. of portfolio managers | 2 |
| Size of research staff | 2 |

Skye Investment Advisors Inc. is an equity and fixed-income manager.

It specializes in risk management and portfolio insurance strategies, using computerized methods to protect portfolios against price decline. Option pricing and optimization theory are used to achieve specified downside protection goals. Options, stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 44% stocks and 56% bonds.

Clients include EquityGuard Stock Fund, Union Bank, First RepublicBank and IMCO.

Paul L. McEntire is chief investment officer; Thomas A. Davis is client contact.

### Smith Affiliated Capital

880 Third Ave., 18th Floor, New York, N.Y. 10022; (212) 644-9440

| | |
|---|---|
| Total assets managed | $425,000,000 |
| Tax-exempt assets managed | $357,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 25 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 6 |
| Size of research staff | 6 |

Smith Affiliated Capital Corp. is a fixed-income and balanced manager.

Its equity approach is value-oriented, using low p/e stocks and quantitative methods with sector rotation and market timing/tactical asset allocation.

Its fixed-income approach focuses on interest rate anticipation and sector analysis.

The firm follows 40 stocks closely and 40 generally; 50% of the research is generated internally.

Clients include Road Carriers 707, Uniroyal, F.W. Woolworth and Bradley Foundation.

Robert G. Smith is the chief investment officer; Edward Lawson, executive vice president, is the client contact.

### Cabanne Smith Associates

101 Bryn Mawr Ave., Bryn Mawr, Pa. 19010; (215) 525-8350

| | |
|---|---|
| Total assets managed | $72,000,000 |
| Tax-exempt assets managed | $65,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 4 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |
| Size of research staff | 3 |

Cabanne Smith Associates is an equity manager.

Its primary focus is on out-of-favor stocks with low p/es and strong underlying fundamentals, and on emerging growth stocks with growth ratios greater than 1/5 times the stock's p/e ratio. Graham & Dodd analysis is also used in making decisions.

Clients include AMP, Boeing and Fox Steel.

Cabanne Smith is the chief investment officer; Stephen P. Hoyt, associate, is the client contact.

### Donald Smith & Co. Inc.

15 Essex Road, Paramus, N.J. 07652; (201) 368-9210

| | |
|---|---|
| Total assets managed | $741,000,000 |
| Tax-exempt assets managed | $741,000,000 |
| 401(k)/457 assets managed | $28,000,000 |
| 401(k)/457 clients | 2 |
| Minimum separate account | $50,000,000 |
| Tax-exempt clients | 13 |
| Types of accounts managed | CEG |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Donald Smith & Co. Inc. is an equity and balanced manager.

Its equity approach is to buy deeply undervalued securities based upon long-term fundamental considerations.

Its fixed-income approach uses interest rate anticipation and sector analysis.

The asset mix Jan. 1 was 62% stocks, 4% bonds and 34% cash.

The firm follows 200 stocks closely and 500 generally; 90% of the research is generated internally.

Clients include Harvard University, University of Texas, Pillsbury and Allied Corp.

Donald G. Smith, president, is the chief investment officer and the client contact.

### Herbert R. Smith Inc.

1105 Holliday, Wichita Falls, Texas 76301; (817) 723-5565

| | |
|---|---|
| Total assets managed | $2,050,000,000 |
| Tax-exempt assets managed | $150,000,000 |
| Real estate assets managed | $8,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 25 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 3 |
| Size of research staff | 1 |

Herbert R. Smith Inc. is an equity, fixed-income and balanced manager.

Its equity approach focuses on growth and emerging growth stocks; sector rotation, market timing and technical analysis are used.

Its fixed-income approach is driven by interest rate anticipation and sector analysis.

The firm follows 100 stocks closely and 200 generally; 20% of research is generated internally.

Clients include Texas Instruments, Harkins and Noble Affiliates & Noble Drilling.

Herbert R. Smith is chief investment officer and client contact.

### Smith Holmquist Inc.

103 Main St., Brattleboro, Vt. 05301; (800) 223-7851

| | |
|---|---|
| Total assets managed | $8,000,000 |
| Tax-exempt assets managed | $250,000 |
| Minimum separate account | $50,000 |
| Tax-exempt clients | 1 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |

Smith Holmquist Inc. is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented, based on a system that weighs interest rates, market level, projected earnings and p/e relative to its historic range and its group.

Its fixed-income approach is to invest in bonds with less than 10 years to maturity with a return of 8% of more and a good return relative to inflation.

The firm follows 95 stocks closely and 300 generally; 75% of research is generated internally.

Vermont National Bank is the client.

Prentiss Smith, president, is chief investment officer; Bruce K. Holmquist, vice president, is client contact.

### Smoot, Miller, Cheney & Co.

10 W. First South, Crandall Building Suite 312, Salt Lake City, Utah 84101; (801) 328-4835

| | |
|---|---|
| Total assets managed | $1,207,000,000 |
| Tax-exempt assets managed | $1,184,000,000 |
| Real estate assets managed | $2,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 65 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 4 |
| Size of research staff | 2 |

Smoot, Miller, Cheney & Co. is an equity, fixed-income and balanced manager.

Its value-oriented, cyclical equity approach emphasizes financially strong companies that offer greater relative value and are generally underowned. Fundamental and technical analysis are blended.

Its fixed-income approach is based on interest rate anticipation.

The asset mix Jan. 1 was 67% stocks, 19% bonds and 14% cash; $2 million was in mortgages.

The firm follows between 60 and 100 stocks closely and 100 to 150, generally; 80% of research is generated internally.

Clients include Utah, Orange County, Arizona Pipe Trades and W.A. Krueger.

Robert Cheney is chief investment officer; Lynn C. Miller is client contact.

### Snyder Capital Management

400 Montgomery St., Suite 700, San Francisco, Calif. 94104; (415) 392-3900

| | |
|---|---|
| Total assets managed | $45,000,000 |
| Tax-exempt assets managed | $17,000,000 |
| International assets managed | $2,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 6 |
| Types of accounts managed | CF |
| No. of portfolio managers | 1 |
| Size of research staff | 2 |

Snyder Capital Management is an equity and balanced manager.

Its equity selection follows a disciplined, value-related approach. Emphasis is on capital preservation and superior upside performance. Its fixed-income approach is passive.

The firm follows 50 stocks closely and 100 generally; 75% of the research is generated internally.

Alan B. Snyder, president, is the chief investment officer; Daniel J. Madison, research analyst, is the client contact.

### Society National Bank

800 Superior Ave., Cleveland, Ohio 44114; (216) 344-5041

| | |
|---|---|
| Total assets managed | $3,227,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,846,000,000 |
| Commingled | $491,000,000 |
| Separate | $1,355,000,000 |
| 401(k)/457 assets managed | $95,000,000 |
| Real estate assets managed | $15,000,000 |
| Minimum separate account | $1,000,000 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 18 |
| Size of research staff | 3 |

Society National Bank is an equity, fixed-income, balanced and GIC manager.

Its equity approach is to invest primarily in stocks offering long-term value. The major exception is the earnings momentum fund, for which stocks are bought that exhibit accelerated earnings.

Its fixed-income approach is to actively manage duration on the basis of projected interest movements.

The asset mix Jan. 1 was 33% stocks, 38% bonds, 9% cash, 1% mortgage-backed securities and 19% GICs.

The bank follows 200 stocks closely and 300 stocks generally; 25% of research is generated internally.

The parent company is Society Corp.

Don Cruse Jr. is chief investment officer; James P. Foster, vice president, is client contact.

### Solomon Asset Management

71 Broadway, Suite 1201, New York, N.Y. 10006; (212) 509-8122

| | |
|---|---|
| Total assets managed | $2,022,000,000 |
| Tax-exempt assets managed | $1,629,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 19 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 2 |
| Size of research staff | 4 |

Solomon Asset Management Inc. is a fixed-income and convertible bond manager, focusing on lower-rated, high-yield and convertible bonds. Security mix depends on yield spreads, but the manager aggressively seeks high total returns without timing interest rates.

The asset mix Jan. 1 was 16% stocks, 81% bonds and 3% cash.

Clients include Pacific Telesis, GM and IBM.

David B. Solomon is chief investment officer; Marianne Murphy is client contact.

### Sound Shore Management

P.O. Box 1810, 8 Sound Shore Drive, Greenwich, Conn. 06836; (203) 629-1980

| | |
|---|---|
| Total assets managed | $333,000,000 |
| Tax-exempt assets managed | $511,000,000 |
| 401(k)/457 assets managed | $4,000,000 |
| 401(k)/457 clients | 1 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 32 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 3 |
| Size of research staff | 1 |

Sound Shore Management Inc., formerly McConnell & Miller Inc., is an equity and balanced manager.

Its equity approach focuses on stocks with low absolute and relative p/e ratios. It seeks financially sound, out-of-favor companies.

Its fixed-income approach uses interest rate anticipation.

The asset mix Jan. 1 was 71% stocks, 2% bonds and 27% cash.

The firm follows 45 to 50 stocks closely and 150 generally; 75% of the research is generated internally.

Clients include Echlin, Figgie International, Harvey Mudd College and Stanley Works.

Harry Burn is the chief investment officer; Richard McConnell is the client contact.

### Southeastern Asset Management Inc.

860 Ridgelake Blvd., Memphis, Tenn. 38119; (901) 761-2474

| | |
|---|---|
| Total assets managed | $775,000,000 |
| Tax-exempt assets managed | $500,000,000 |
| 401(k)/457 assets managed | $50,000,000 |
| 401(k)/457 clients | 10 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 76 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 5 |
| Size of research staff | 5 |

Southeastern Asset Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented, utilizing low p/e and Graham & Dodd analysis. It chooses stocks whose prices are significantly below their intrinsic worth as determined by liquidating value, cash generating ability and comparable sales price.

The asset mix Jan. 1 was 70% stocks, 5% bonds and 25% cash.

It follows 100 stocks closely and 500 generally; all research is generated internally.

Clients include University of Alabama, Litton Industries, Carson Pirie Scott and City of Jacksonville.

O. Mason Hawkins is chief investment officer; Frank N. Stanley III is client contact.

### Southmark Pension Advisers Inc.

1601 LBJ Freeway, No. 850, Dallas, Texas 75234; (214) 241-8787

| | |
|---|---|
| Total assets managed | $30,000,000 |
| Tax-exempt assets managed | $30,000,000 |
| Real estate assets managed | $11,000,000 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 5 |
| Types of accounts managed | CJ |
| No. of portfolio managers | 3 |
| Size of research staff | 8 |

Southmark Pensions Advisers Inc. is a real estate manager.

Its real estate approach uses contrarian, value-added and investment appreciation within primary and secondary markets. An emphasis is placed on appreciation.

The parent company is Southmark Corp.

Clients include 3M, Kodak, Unisys and Gannett.

Richard D. Spence, president, is the chief investment officer and the client contact.

### Southport Financial Corp.

2507 Post Road, Southport, Conn. 06490; (203) 255-3434

| | |
|---|---|
| Total assets managed | $287,000,000 |
| Tax-exempt assets managed | $41,000,000 |
| Real estate assets managed | $41,000,000 |
| Tax-exempt clients | 6 |
| Types of accounts managed | C |

Southport Financial Corp. is a real estate manager.

Its approach is client specific.

All tax-exempt assets Jan. 1 were in equity real estate.

C. Wheaton Vaughan, executive vice president, is the client contact.

### Southwestern Life Insurance

P.O. Box 2699, Dallas, Texas 75221; (214) 954-7111

| | |
|---|---|
| Total assets managed | $2,497,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,279,000,000 |
| Pooled accounts | $7,000,000 |
| Separate accounts | $3,000,000 |
| GICs | $773,000,000 |
| Annuities | $12,000,000 |
| Other | $484,000,000 |
| 401(k)/457 assets managed | $2,000,000 |
| 401(k)/457 clients | 70 |
| Real estate assets managed | $200,000,000 |
| Minimum separate account | $10,000 |
| Tax-exempt clients | 112 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

Southwestern Life Insurance Co., primarily a fixed-income manager, uses sector analysis and various other fixed-income approaches. Options are used.

The separate account asset mix Jan. 1 was 54% stocks, 12% bonds, 32% cash and 2% mortgage-backed securities.

Clients include Texas Instruments, Eli Lilly and Illinois Power.

The parent company is ICH Corp.

Jerry Hitpas, president of ICH Financial Services, is chief investment officer; Frank L. "Chip" Gillis, senior vice president-pension marketing, is client contact.

### Sovran Bank/Maryland

6610 Rockledge Drive, Bethesda, Md. 20817; (301) 493-2909

| | |
|---|---|
| Total assets managed | $600,000,000 |
| Tax-exempt assets managed: | |
| Total | $220,000,000 |
| Commingled | $14,000,000 |
| Separate | $206,000,000 |
| Real estate assets managed | $7,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients: | |
| Commingled | 52 |
| Separate | 143 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 7 |
| Size of research staff | 4 |

Sovran Bank/Maryland is an equity, fixed-income and balanced manager.

Its equity approach incorporates the use of relative valuation analysis and earnings momentum to arrive at a model. Options are used.

Its fixed-income approach focuses on analysis of the yield curve, sector and duration.

Stephen C. Thormahlen is chief investment officer; Carl Brudin is client contact.

### Sovran Capital Management

12th & Main Sts., Richmond, Va. 23219; (804) 788-2316

| | |
|---|---|
| Total assets managed | $1,550,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,550,000,000 |
| Commingled | $220,000,000 |
| Separate | $1,330,000,000 |
| 401(k)/457 assets managed | $40,000,000 |
| 401(k)/457 clients | 2 |
| Real estate assets managed | $230,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients: | |
| Commingled | 6 |
| Separate | 57 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 5 |

Sovran Capital Management is an equity, fixed-income and balanced manager.

Its equity approach focuses on low p/e, higher-yield stocks within fully invested, well-diversified portfolios.

Its fixed-income approach uses three strategies: active sector rotation, moderate maturity changes and yield curve analysis.

The asset mix Jan. 1 was 25% stocks, 60% bonds and 15% mortgages. As of the same date, the firm had $230 million in mortgages.

The parent company is Sovran Financial Corp.

Clients include Bell Atlantic, D.C. Retirement Fund, CSX and Oklahoma Police.

Stuart Sachs, president, is chief investment officer; William Schultz, senior vice president for fixed income, and Dick Tashjian, senior vice president for equities, are client contacts.

### George B. Springman Inc.

44 Montgomery St., Suite 626, San Francisco, Calif. 94104-4608; (415) 362-5005

| | |
|---|---|
| Total assets managed | $175,000,000 |
| Tax-exempt assets managed | $175,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 3 |
| Types of accounts managed | G |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

George B. Springman Inc., an equity manager, stresses bottom-up valuation emphasizing large-cap issues with lower p/e ratios. It has a moderately conservative/defensive, opportunity-driven style.

It follows 50 stocks closely and 200 generally; 35% of research is generated internally.

Clients include San Francisco City & County, Contra Costa County and Oregon.

George B. Springman, president, is chief investment officer and client contact.

### Sprout Group

140 Broadway, New York, N.Y. 10005; (212) 504-3600

| | |
|---|---|
| Total assets managed | $200,000,000 |
| Tax-exempt assets managed | $120,000,000 |
| Tax-exempt clients | 25 |
| Types of accounts managed | CEP |
| No. of portfolio managers | 9 |
| Size of research staff | 2 |

Sprout Group, a venture capital manager, seeks significant appreciation through investment in early-round and later-stage financings of U.S. companies with unusually high growth potential, and leveraged and management buy-outs of mature companies.

The parent company is Donaldson, Lufkin & Jenrette, a subsidiary of Equitable Life Assurance Society of the United States.

Clients include GE, General Foods and the University of North Carolina.

Richard E. Kroon is client contact.

### Standish, Ayer & Wood Inc.

1 Financial Center, Boston, Mass. 02111; (617) 350-6100

| | |
|---|---|
| Total assets managed | $7,524,000,000 |
| Tax-exempt assets managed | $3,803,000,000 |
| Real estate assets managed | $760,000,000 |
| International assets managed | $200,000,000 |
| Dedicated funds managed | $100,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 123 |
| Types of accounts managed | CEPG |
| No. of portfolio managers | 13 |
| Size of research staff | 5 |

Standish, Ayer & Wood Inc. is an equity, fixed-income, balanced and international manager.

Its value/growth equity approach combines Graham & Dodd analysis, growth stock and sector rotation.

Its fixed-income approach stresses active management using intermediate maturities and sector analysis.

Options and fixed-income futures are used.

The asset mix Jan. 1 was 16% stocks, 59% bonds, 5% cash and 20% mortgages. As of the same date, the firm had $10 million in foreign stocks and $190 million in foreign bonds.

The firm follows 150 stocks closely and 300 generally; 80% of the research is generated internally.

Clients include Northeastern University, Frank Russell Investment, Commonwealth of Massachusetts and NYNEX.

D. Barr Clayson, managing director, is chief investment officer; Richard C. Doll, director of marketing and client service, is the client contact.

### Starbuck, Tisdale & Associates

301 E. Carrello St., Santa Barbara, Calif. 93101; (805) 963-5963

| | |
|---|---|
| Total assets managed | $102,000,000 |
| Tax-exempt assets managed | $51,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 12 |
| Types of accounts managed | CPG |
| No. of portfolio managers | 2 |

Starbuck, Tisdale & Associates is a balanced manager.

Its equity approach is value-oriented, using low p/e stocks and Graham & Dodd analysis. The firm offers a traditional, fundamental approach to management.

Its fixed-income approach is to purchase instruments so the duration of the assets coincide (within reason) with the cash needs of the client.

The firm follows 80 stocks closely and 45 generally; 50% of the research is generated internally.

L. David Tisdale is the chief investment officer; Patrick S. Steele is the client contact.

### State Mutual Cos.

440 Lincoln St., Worcester, Mass. 01605; (617) 852-1000

| | |
|---|---|
| Total assets managed | $5,000,000,000 |
| Tax-exempt assets managed: | |
| Total | $2,600,000,000 |
| Pooled accounts | $140,000,000 |
| GICs | $1,600,000,000 |
| Annuities | $40,000,000 |
| Other | $820,000,000 |
| Indexed assets managed | $12,000,000 |
| Minimum separate account | $5,000,000 |
| Types of accounts managed | CEFG |

State Mutual Cos. is an equity, fixed-income and balanced manager.

Its equity approach includes active and passive management; it uses sector rotation and growth and emerging growth stocks, and is a value-added contrarian.

In fixed income, it offers active and passive management and immunization and dedication.

Options and financial futures are used.

The separate account asset mix Jan. 1 was 70% stocks, 15% bonds and 15% money markets; $12 million was in equity index funds.

The parent company is State Mutual Life Assurance Co. of America.

James McAuliffe, vice president, is chief investment officer; Rich McGirr, vice president-group marketing, is client contact.

### State Street Bank and Trust

225 Franklin St., Boston, Mass. 02110; (617) 654-3953

| | |
|---|---|
| Total assets managed | $30,470,000,000 |
| Tax-exempt assets managed: | |
| Total | $26,930,000,000 |
| Commingled | $10,590,000,000 |
| Separate | $16,340,000,000 |
| 401(k)/457 assets managed | $4,160,000,000 |
| 401(k)/457 clients | 70 |
| Real estate assets managed | $690,000,000 |
| International assets managed | $3,500,000,000 |
| Indexed assets managed | $11,240,000,000 |
| Dedicated assets managed | $240,000,000 |
| Tax-exempt clients: | |
| Commingled | 800 |
| Separate | 135 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 30 |
| Size of research staff | 10 |

State Street Bank and Trust Co. is an equity, fixed-income, balanced, real estate, international/global and futures manager.

Its equity approach is passive, offering predominantly index funds. Active accounts are highly quantitative, designed for high performance.

Its fixed-income approach is passive, focusing on intelligent risk management for active, immunized, dedicated and indexed income portfolios. The firm specializes in using financial futures to alter portfolio asset allocation and risk profile.

Its real estate approach uses closed-end, commingled and broadly diversified portfolios. It invests in equity real estate on a fee basis, using active management.

The asset mix Jan. 1 was 51% stocks, 12% bonds, 25% cash, 2% equity real estate, 1% mortgage-backed securities, 2% futures and 7% GICs. As of the same date, $3.5 billion in foreign stocks, $9.28 billion in equity index funds and $1.96 billion in bond index funds.

The parent company is State Street Boston Corp.

Nicholas A. Lopardo is chief investment officer; Peter E. Braun, vice president, is client contact.

### State Street Research & Management Co.

1 Financial Center, Boston, Mass. 02111; (617) 482-3920

| | |
|---|---|
| Total assets managed | $14,633,000,000 |
| Tax-exempt assets managed | $11,393,000,000 |
| Real estate assets managed | $800,000,000 |
| Dedicated funds managed | $245,000,000 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 61 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 15 |
| Size of research staff | 20 |


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State Street Research & Management Co. is an equity, fixed-income and balanced manager.

Its equity approach is value oriented and price sensitive, relying heavily on internally generated fundamental research. Growth stocks are targeted; sector rotation is used.

Its fixed-income approach focuses on interest rate forecasting as well as sector and issuer weightings. Portfolios are actively managed. Fixed-income futures are used.

The asset mix Jan. 1 was 54% stocks, 29% bonds, 8% cash and 9% mortgage-backed securities.

The firm follows between 250 and 350 stocks closely and 550, generally; 95% of research is generated internally.

The parent is Metropolitan Life Insurance Co.

Wayne D. Thornbrough is chief investment officer; Edward W. Bickford, vice president, is client contact.

## Steele & Co. Ltd.

42 E. Gay St., Suite 1312, Columbus, Ohio 43215; (614) 461-5901

| | |
|---|---|
| Total assets managed | $43,000,000 |
| Tax-exempt assets managed | $13,000,000 |
| Minimum separate account | $350,000 |
| Tax-exempt clients | 16 |
| Types of accounts managed | CEG |
| No. of portfolio managers | 1 |

Steele & Co. Ltd. is an equity, fixed-income and balanced manager.

Its equity approach uses growth and emerging growth stock, sector rotation and market timing. Technical analysis is emphasized for stocks and bonds.

Its fixed-income approach uses interest rate anticipation and trend analysis based on technical analysis. Its fixed-income model allows swift market timing between long-term Treasury securities and cash.

Stock index futures are used.

The firm follows 50 stocks closely: 90% of the research is generated internally.

Michael B. Steele is the chief investment officer and the client contact.

## Stein Roe & Farnham

1 S. Wacker Drive, Chicago, Ill. 60606; (312) 368-7632

| | |
|---|---|
| Total assets managed | $13,091,000,000 |
| Tax-exempt assets managed | $5,266,000,000 |
| 401(k)/457 assets managed | $201,000,000 |
| 401(k)/457 clients | 75 |
| Real estate assets managed | $400,000,000 |
| International assets managed | $12,000,000 |
| Index funds managed | $50,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 857 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 52 |
| Size of research staff | 28 |

Stein Roe & Farnham is an equity, fixed-income and balanced manager.

Its equity approach seeks opportunities in growth, large capitalization, emerging growth and low p/e stocks through a blending of qualitative and quantitative analysis. It uses a 6,500-stock data base to manage portfolios with different investment objectives and styles.

Its fixed-income approach is risk-averse and employs multiple disciplines (maturity optimization, sector rotation and credit selection) with a bias toward capital preservation in bear markets.

Options, stock index futures and fixed-income futures are used.

The asset mix Jan. 1 was 49% stocks, 27% bonds, 20% cash and 4% mortgage-backed securities. As of the same date, the firm had $12 million in foreign stocks and $50 million in equity indexed funds.

Liberty Mutual Insurance owns 80% of Stein Roe Farnham.

Alfred F. Kugel, executive vice president, is the chief investment officer; Richard L. Ford, first vice president, is the client contact.

## Sterling Capital Management

1770 Independence Center, Charlotte, N.C. 28246; (704) 372-8670

| | |
|---|---|
| Total assets managed | $707,000,000 |
| Tax-exempt assets managed | $523,000,000 |
| 401(k)/457 assets managed | $12,000,000 |
| 401(k)/457 clients | 3 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 94 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 5 |

Sterling Capital Management, an equity manager, emphasizes asset allocation. It focuses on low p/e, sector rotation, market timing and quantitative techniques to preserve capital while minimizing volatility of returns.

The asset mix Jan. 1 was 28% stocks, 47% bonds and 25% cash.

The firm follows 200 stocks closely and 1,000 generally; 50% of the research is generated internally.

The parent company is United Asset Management.

Clients include Dean Witter Reynolds, Central Bank of the South and Piedmont Aviation.

W. Olin Nisbet, president, is the chief investment officer; J. Calvin River, vice president-marketing, is the client contact.

## Stock Yards Bank & Trust

1040 E. Main St., Louisville, Ky. 40206; (502) 582-2571

| | |
|---|---|
| Total assets managed | $320,000,000 |
| Tax-exempt assets managed: | |
| Total | $220,000,000 |
| Commingled | $5,000,000 |
| Separate | $215,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients: | |
| Commingled | 24 |
| Separate | 256 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 3 |
| Size of research staff | 3 |

Stock Yards Bank & Trust Co. is an equity, fixed-income, balanced and options manager.

Its equity approach uses Graham & Dodd analysis and a covered call option strategy. Its fixed-income approach writes covered call options against government securities.

R. Keith Cullinan, executive vice president and trust officer, is chief investment officer; Geri Silliman, business development officer, is client contact.

## Stratton Capital Management Inc.

4900 Main St., Suite 718, Kansas City, Mo. 64112; (816) 561-5670

| | |
|---|---|
| Total assets managed | $5,000,000 |
| Tax-exempt assets managed | $4,000,000 |
| Minimum separate account | $50,000 |
| Tax-exempt clients | 25 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |

Stratton Capital Management Inc. is an equity and balanced manager.

Its equity approach uses technical analysis of individual issues to screen for the stocks that appear to be under accumulation. Sell disciplines are emphasized.

Its fixed-income approach uses interest rate anticipation to select short- to intermediate-term Treasuries.

The firm follows 50 stocks closely and 250 generally; all research is generated internally.

John Stratton, president, is the chief investment officer; Owen B. Stratton, director of marketing, is the client contact.

## Strong/Corneliuson Capital Management Inc.

100 Heritage Reserve, Menomonee Falls, Wis. 53051; (414) 359-3400

| | |
|---|---|
| Total assets managed | $3,498,000,000 |
| Tax-exempt assets managed | $1,720,000,000 |
| International assets managed | $5,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 84 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 3 |

Strong/Corneliuson Capital Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach uses growth and low p/e stocks and Graham & Dodd analysis. Its fixed-income approach is based on interest rate anticipation.

Options, stock index futures and fixed-income futures are used for hedging purposes only.

The asset mix Jan. 1 was 31% stocks, 25% bonds and 44% cash. As of the same date, the firm had $5 million in foreign stocks.

The firm follows 100 stocks closely and 300 generally; all research is generated internally.

Clients include Southern Co. Services, Inland Container, Johnson Controls and Public Service Electric & Gas.

Richard S. Strong, chairman, and William D. Corneliuson, vice chairman, are the chief investment officers; Bruce D. Behling, president, is the client contact.

## Stuyvesant Capital Management Corp.

50 Broad St., New York, N.Y. 10004; (212) 422-8773

| | |
|---|---|
| Total assets managed | $125,000,000 |
| Tax-exempt assets managed | $96,000,000 |
| Real estate assets managed | $13,000,000 |
| Minimum separate account | $300,000 |
| Tax-exempt clients | 47 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 3 |

Stuyvesant Capital Management Corp. is an equity, fixed-income and balanced manager.

Its equity approach consists of a Graham & Dodd valuation model to determine disciplined buy and sell points; it monitors major technical market indicators.

Its fixed-income approach is to manage portfolios to take advantage of the opportunities that evolve over the course of an interest rate cycle. Business cycles are determined by its business index.

Donald Von Wedel is chief investment officer and client contact.

## STW Fixed Income Management Inc.

1165 Coast Village Road, Santa Barbara, Calif. 93108; (805) 565-1625

| | |
|---|---|
| Total assets managed | $3,505,000,000 |
| Tax-exempt assets managed | $2,823,000,000 |
| 401(k)/457 assets managed | $50,000,000 |
| 401(k)/457 clients | 2 |
| Real estate assets managed | $70,000,000 |
| International assets managed | $450,000,000 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients | 63 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 2 |

STW Fixed Income Management Inc. is a fixed-income and international manager.

Its fixed-income approach is active, maximizing future streams of income by seeking the cheapest bonds (considering quality, maturity, coupon and sector).

All tax-exempt assets Jan. 1 were invested in bonds. The firm had $70 million in mortgages and $450 million in foreign bonds.

William H. Williams III is the chief investment officer; Greg S. Reid is the client contact.

## Sullivan, Morrissey & Mickle Capital Management Corp.

450 Park Ave. Suite 2003, New York, N.Y. 10022; (212) 832-7440

| | |
|---|---|
| Total assets managed | $149,000,000 |
| Tax-exempt assets managed | $113,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 19 |
| Types of accounts managed | CJ |
| No. of portfolio managers | 3 |

Sullivan, Morrissey & Mickle Capital Management Corp., an equity and balanced manager, takes a value/growth-oriented approach.

The firm follows 150 stocks closely and 500, generally; 95% of research is generated internally.

Clients include Beecham, Cunard Lines, Redemptorist Fathers and Washington Gas Light.

John F. Sullivan, chairman, is chief investment officer and client contact.

## Sumitomo Bank of California Trust Department

320 California St., 3rd Floor, San Francisco, Calif. 94104; (415) 445-8097

| | |
|---|---|
| Total assets managed | $35,000,000 |
| Tax-exempt assets managed | $10,000,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |

Sumitomo Bank of California Trust Department, a balanced manager, uses Graham & Dodd analysis to identify investment-quality equities. In fixed-income, interest rate anticipation is used.

The parent company is Sumitomo Bank Ltd., Japan.

Clients include Azumaya Inc., Norsk Pacific Steamship Co. Ltd. and Kinney/Bernardi Inc.

Edward H. Turner Jr., assistant vice president and trust investment officer, is chief investment officer and client contact.

## Sun Bank Investment Management Group

P.O. Box 3808, Orlando, Fla. 32803; (305) 644-8076

| | |
|---|---|
| Total assets managed | $3,165,000,000 |
| Tax-exempt assets managed: | |
| Total | $2,300,000,000 |
| Commingled | $486,000,000 |
| Separate | $1,814,000,000 |
| 401(k)/457 assets managed | $80,000,000 |
| 401(k)/457 clients | 30 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients: | |
| Commingled | 750 |
| Separate | 57 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 7 |
| Size of research staff | 4 |

Sun Bank Investment Management Group is an equity, fixed-income and balanced manager.

Its value-oriented, large-cap approach uses active portfolio management emphasizing stocks with above-average historical expected growth and strong fundamentals that are selling at low relative prices.

Its fixed-income approach emphasizes using the full range of maturities and shifts holdings on the basis of interest rate anticipation, sector swapping and yield curve analysis.

The real estate fund holds income-producing properties, including shopping centers, small office buildings, light industrial warehouses and offices.

The asset mix Jan. 1 was 70% stocks, 23% bonds and 7% cash.

The parent company is SunTrust Banks Inc.

Anthony R. Gray, president, is the chief investment officer; Victor A. Zollo Jr., senior vice president, is the client contact.

## Sun Life of Canada Investment Management

200 University Ave., Toronto, Ontario M5H 3C7; (416) 595-7809

| | |
|---|---|
| Total assets managed | $1,712,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,588,000,000 |
| For subsidiaries of U.S. firms | $410,000,000 |
| Dedicated assets | $20,000,000 |
| Minimum separate account | $1,500,000 |
| Tax-exempt clients | 138 |
| U.S. subsidiaries | 27 |
| Types of accounts managed | CEFGU |
| No. of portfolio managers | 9 |
| Size of research staff | 25 |

Sun Life of Canada Investment Management Ltd., a Canadian firm, is an equity, fixed-income, balanced, real estate and private placement manager.

Its equity approach stresses undervalued situations, using Graham and Dodd analysis with low p/e stocks and sector rotation. Its fixed-income approach emphasizes interest rate anticipation, sector swapping and immunization. Its real estate approach concentrates on acquisition of geographically diverse, good-quality industrial, commercial and office properties.

The asset mix Jan. 1 was 32% Canadian stocks, 28% bonds, 5% cash, 12% equity real estate, 16% mortgages, 6% U.S. stocks and 1% venture capital.

The parent company is Sun Life Assurance Co. of Canada.

Donald T. Walcot, president, is chief investment officer; Peter Salloum, vice president, is client contact.

## Sutro Capital Management

201 California St., San Francisco, Calif. 94111; (415) 445-8530

| | |
|---|---|
| Total assets managed | $80,000,000 |
| Tax-exempt assets managed | $40,000,000 |
| Real estate assets managed | $1,000,000 |
| International assets managed | $1,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 28 |
| Types of accounts managed | CF |
| No. of portfolio managers | 2 |

Sutro Capital Management is an equity, fixed-income and a balanced manager.

Its equity approach emphasizes low p/e stocks, quality, value and long-term total return, and is concept-sector driven. Its fixed-income approach is based on interest rate anticipation.

The parent company is John Hancock Mutual Life Insurance Co.

Lewis H. Katcher is chief investment officer; he and Stephen P. Yeatman are client contacts.

## Systematic Investors

184 High St., Boston, Mass. 02110; (617) 423-9691

| | |
|---|---|
| Total assets managed | $11,000,000 |
| Tax-exempt assets managed | $11,000,000 |
| International assets managed | $1,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 3 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

Systematic Investors is an equity and balanced manager.

Its equity approach uses quantitative techniques to optimize the blending of value and trend.

Its fixed-income approach concentrates on high yield.

Clients include National Gypsum, Western Atlas International and Beverage Management.

Loren M. Wood is the chief investment officer; Joanne M. Fay is the client contact.

T

## T.A.L. Investment Counsel

55 University Ave., Suite 605, Toronto, Ontario M5J 2H7; (416) 364-5620

| | |
|---|---|
| Total assets managed | $2,000,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,760,000,000 |
| For subsidiaries of U.S. firms | $240,000,000 |
| Real estate assets managed | $12,000,000 |
| Non-North American assets | $8,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 84 |
| U.S. subsidiaries | 11 |
| Types of accounts managed | CEFGU |
| No. of portfolio managers | 6 |
| Size of research staff | 2 |

T.A.L. Investment Counsel Ltd., a Canadian firm, is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented, using growth stocks and sector rotation. Volatility management, extensive use of computer screens and private management interviews are three elements of its approach.

Its fixed-income approach is influenced by interest rate anticipation and sector and coupon analysis. Extending the range of selected bonds to less actively traded segments of the markets adds value.

The asset mix Jan. 1 was 34% Canadian stocks, 10% U.S. stocks, 43% bonds, 11% cash, 1% equity real estate and 1% mortgages.

It follows 250 stocks closely and 400 generally; 80% of research is generated internally.

Jean Guy Desjardins is chief investment officer. The client contacts are Charles Wakefield in Toronto and Guy Normandin in Montreal at (514) 875-7040.

## Tallasi Management Co. Inc.

1 Battery Park Plaza, New York, N.Y. 10004; (212) 248-3090

| | |
|---|---|
| Total assets managed | $358,000,000 |
| Tax-exempt assets managed | $300,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 24 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 3 |

Tallasi Management Co. Inc., an equity and balanced manager, uses Graham & Dodd analysis, low p/e stocks and sector rotation in its defensive equity approach.

It follows 300 stocks closely and 500 generally; 50% of research is generated internally.

Clients include Williams Cos., Santa Fe Industries, Wickes and Inalco.

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Rodney B. Mitchell is chief investment officer; Steven M. O'Connell, director of marketing, is client contact.

### Taplin, Canida & Habacht

1177 Kane Concourse, Bay Harbor, Fla. 33154; (305) 861-1177

| | |
|---|---|
| Total assets managed | $90,000,000 |
| Tax-exempt assets managed | $15,000,000 |
| Real estate assets managed | $1,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 11 |
| Types of accounts managed | CG |
| No. of portfolio managers | 3 |

Taplin, Canida & Habacht is an equity, fixed-income and balanced manager.

Its equity approach is value oriented, screening a broad universe of stocks using low p/es and Graham & Dodd analysis. Its fixed-income approach uses interest rate anticipation to determine overall maturity structure. Sector emphasis is driven by spread relationships.

The firm follows 100 to 150 stocks closely and 2,000, generally; 60% of research is generated internally.

Alan Habacht is chief investment officer; Teresa Alvarez Canida is client contact.

### Target Investors Inc.

Century Plaza South, 100 Prospect St., Stamford, Conn. 06901; (203) 359-0600

| | |
|---|---|
| Total assets managed | $160,000,000 |
| Tax-exempt assets managed | $160,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 6 |
| Types of accounts managed | CG |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

Target Investors Inc., an equity manager, invests in small to midsize growth companies having relatively low p/es, strong balance sheets and positive earnings surprise potential.

It follows 50 stocks closely and 6,000 generally; 90% of research is generated internally.

Clients include Allied-Signal, Dallas, Champion International and Carolina Power & Light.

Robert Zuccaro, president, is chief investment officer; Mary Jane Boyle, vice president-marketing, is client contact.

### Templeton International

Broward Financial Centre, Suite 2100, Fort Lauderdale, Fla. 33394-3091; (305) 764-7390

| | |
|---|---|
| Total assets managed | $15,400,000,000 |
| Tax-exempt assets managed | $2,000,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 34 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 10 |
| Size of research staff | 12 |

Templeton International is an equity, fixed-income, balanced and international manager.

Its equity approach is based on Graham & Dodd analysis and low p/e stocks searching for undervalued securities. Its long-term approach precludes any country or currency allocation. Strategy remains flexible and responsive to the selection of stocks based primarily on their relative undervaluation.

Its fixed-income approach uses sector analysis, identifying initially those countries with the most positive currency and interest rate outlook. Subsequently, a value analysis occurs, factoring in liquidity, volatility and market size.

The asset mix Jan. 1 was 86% stocks, 4% bonds and 10% cash.

The parent company is Templeton, Galbraith & Hansberger Ltd.

John M. Templeton is chief investment officer; Thomas L. Hansberger, president, is client contact.

### Texas American Investment Management

500 Throckmorton, Fort Worth, Texas 76113; (817) 338-8439

| | |
|---|---|
| Total assets managed | $2,767,000,000 |
| Tax-exempt assets managed | $605,000,000 |
| 401(k)/457 assets managed | $25,000,000 |
| 401(k)/457 clients | 5 |
| Real estate assets managed | $60,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 186 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 5 |
| Size of research staff | 1 |

Texas American Investment Management is an equity, fixed-income, balanced and real estate manager.

Its equity approach is based on a long-term philosophy that is fundamental in nature but still oriented toward growth through high-value investments.

Its fixed-income approach is passive, seeking maximum income and preservation of principal through diversified investments in intermediate-term securities.

Its real estate approach is to actively invest in high-quality income-producing properties offering competitive cash returns and significant potential for appreciation.

The asset mix Jan. 1 was 35% stocks, 30% bonds, 20% cash, 10% equity real estate and 5% GICs.

The parent company is Texas American Bancshares.

Harold Achziger, president, is chief investment officer; Gary C. Nelson, senior vice president, is client contact.

### Texas Commerce Investment Management

600 Travis, Houston, Texas 77252-6032; (713) 236-5708

See entry for THE CHEMICAL INVESTMENT GROUP.

### Third National Bank

Financial Services Division, Nashville, Tenn. 37244; (615) 748-4391

| | |
|---|---|
| Total assets managed | $1,472,000,000 |
| Tax-exempt assets managed: | |
| Total | $528,000,000 |
| Commingled | $250,000,000 |
| Separate | $278,000,000 |
| 401(k)/457 assets managed | $67,000,000 |
| 401(k)/457 clients | 28 |
| Real estate assets managed | $21,000,000 |
| Indexed assets managed | $25,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 404 |
| Separate | 44 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 10 |

Third National Bank is an equity, fixed-income, balanced, real estate and GIC fund manager.

Its equity approach is based on top-down sector rotation, emphasizing shifts through the business cycle.

Its fixed-income approach is quantitative, matching a target risk level and adding value through detailed yield curve analysis and various options and fixed-income futures strategies.

Its real estate approach emphasizes purchasing income-producing properties of $1 million to $5 million in the secondary markets of the Southeast.

The asset mix Jan. 1 was 20% stocks, 39% bonds, 1% cash, 3% equity real estate, 1% mortgages, 6% miscellaneous and 30% money market.

The parent company is SunTrust Banks Inc.

Parker Thomas is chief investment officer; Dick Moser is client contact.

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Consultants: Oct. 17.

### Thompson/Rubinstein Investment Management

715 S.W. Morrison, Suite 604, Portland, Ore. 97205; (503) 224-1488

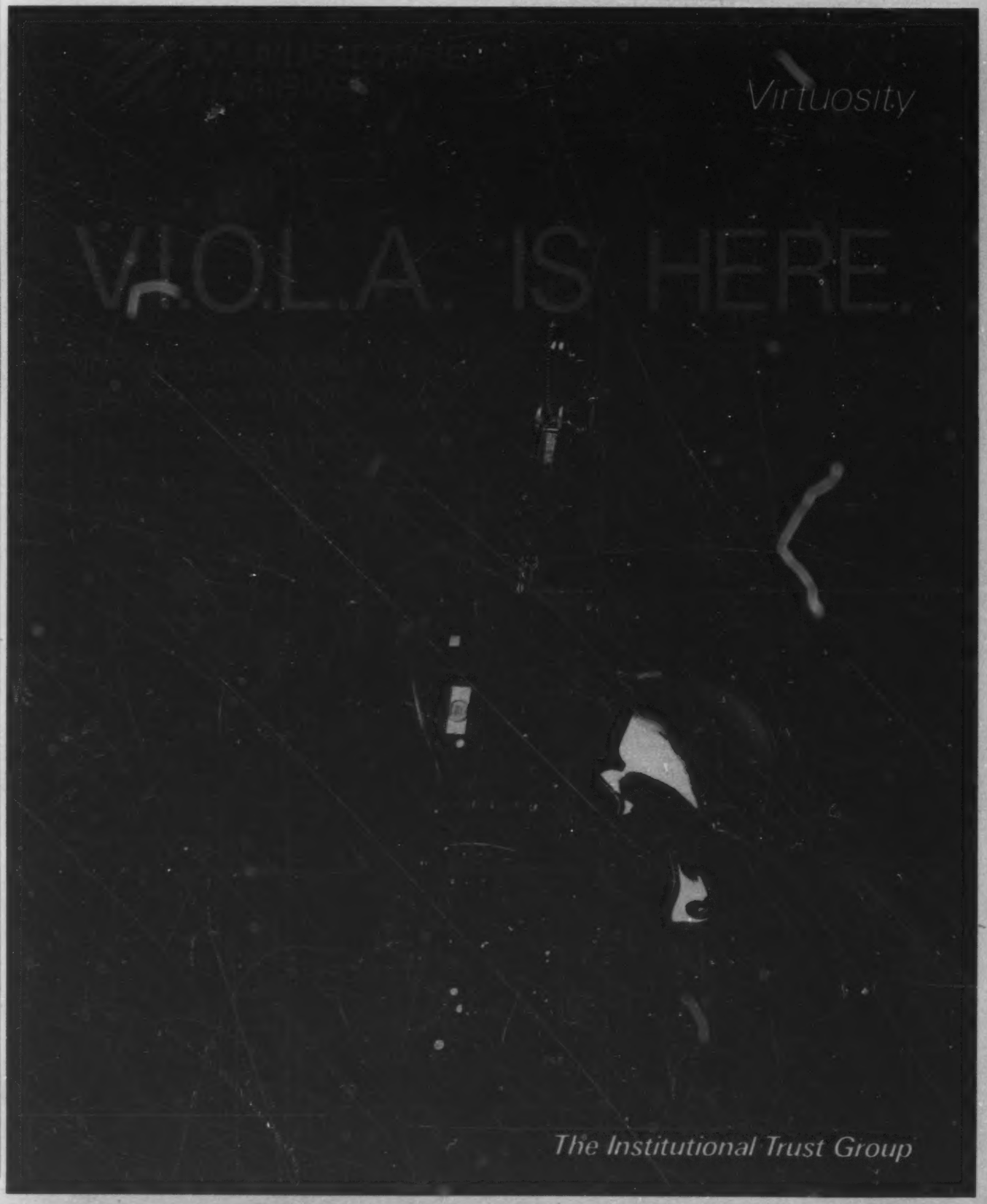
| | |
|---|---|
| Total assets managed | $264,000,000 |
| Tax-exempt assets managed | $170,000,000 |
| Real estate assets managed | $1,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 67 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 5 |

Thompson/Rubinstein Investment Management Inc. is an equity, fixed-income and balanced manager.

Its bottom-up equity approach emphasizes companies that have a history of earnings and dividend growth, high ROE and management that has substantial investment in the business.

Its fixed-income approach is based on interest rate anticipation, investing in U.S. government and high-quality corporate securities with maturities of 10 years or less.

Fay L. Thompson and Richard A.



Rubinstein are chief investment officers; Tim F. Ellis, vice president, is client contact.

## Thompson, Siegel & Walmsley Inc.

5000 Monument Ave., Richmond, Va. 23230; (804) 353-4500

| | |
|---|---|
| Total assets managed | $2,450,000,000 |
| Tax-exempt assets managed | $2,205,000,000 |
| 401(k)/457 assets managed | $200,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 109 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 6 |

Thompson, Siegel & Walmsley Inc. is an equity and balanced manager.

It follows a conservative, risk-averse, value-oriented equity approach incorporating economic top-down analysis, valuation and fundamental security analysis and asset allocation tools as building block disciplines in a highly structured decision-making process.

Its fixed-income approach also is conservative and risk-averse, incorporating economic top-down analysis, fundamental credit analysis and sector spread analysis. Average maturities range from four to 12 years through the cycle. Quality is emphasized.

The asset mix Jan. 1 was 52% stocks, 38% bonds and 10% cash.

It follows 200 stocks closely and 500 generally; 60% of research is generated internally.

The parent company is United Asset Management.

Clients include James River, Burroughs Wellcome and PacTel.

The chief investment officers are Matthew Thompson, John Siegel and S. Pierce Walmsley, managing directors, and Horace Whitworth II and Paul Fenwerda, vice presidents. Mr. Thompson is client contact.

## Thompson, Unger & Plumb

4610 University Ave., Madison, Wis. 53705; (608) 231-1676

| | |
|---|---|
| Total assets managed | $131,000,000 |
| Tax-exempt assets managed | $72,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 97 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 3 |

Thompson, Unger & Plumb Inc., formerly FMI Capital Management Inc., is an equity, fixed-income and balanced manager.

Its equity approach involves buying midsize growth companies at or near S&P 500 p/e levels and holding them until the fundamentals weaken or until the p/e reaches an overvalued level.

Its fixed-income approach uses interest rate anticipation for longer-term trends.

Clients include Wisconsin Power & Light Foundation, Edgewood Clinic and Paper Converting Machine.

Raymond F. Unger is chief investment officer; Thomas G. Plumb is client contact.

## Thorson, Brown & Plunkett

43 Arch St., Greenwich, Conn. 06830; (203) 661-0666

| | |
|---|---|
| Total assets managed | $342,000,000 |
| Tax-exempt assets managed | $79,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 33 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 5 |

Thorson, Brown & Plunkett Inc., an equity and balanced manager, is theme-oriented. The firm emphasizes growth investments with a bias toward small and midsize companies and companies that tend to be underowned institutionally. It focuses on identifying emerging trends, with capital concentrated in sectors and companies that will benefit.

Its fixed-income approach is based on interest rate anticipation.

Petr A. Thorson and John H. Plunkett, managing directors, are chief investment officers; Pegeen M. Burgess is vice president and director of marketing.

## Todd Investment Advisors

3160 First National Tower, Louisville, Ky. 40202; (502) 585-3121

| | |
|---|---|
| Total assets managed | $2,511,000,000 |
| Tax-exempt assets managed | $2,392,000,000 |
| 401(k)/457 assets managed | $10,000,000 |
| 401(k)/457 clients | 2 |
| Real estate assets managed | $125,000,000 |
| Index funds managed | $210,000,000 |
| Dedicated funds managed | $150,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 22 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 4 |

Todd Investment Advisors Inc. is an equity, fixed-income, balanced and enhanced index manager.

Its equity approach is conservative with a strong capital-preservation bent focusing on low-beta, large-cap and high-yield stocks. It uses aggressive shifts between sectors and industry groups. Valuation studies determine asset allocation, while quantitative measures control buying and selling.

Its fixed-income approach is based on interest rate anticipation. High-quality securities are used with aggressive shifts in average maturity.

Options, stock index futures and fixed-income futures can be used.

The asset mix Jan. 1 was 19% stocks, 58% bonds, 18% cash and 5% mortgage-backed securities; $210 million was in bond indexed funds.

The firm follows 100 stocks closely and 450 generally; 60% of the research is generated internally.

Clients include Kentucky Teachers, Memphis, Louisville Gas & Electric and Ohio Casualty Insurance.

Bosworth M. Todd Jr., president, is chief investment officer; Robert M. Calvert, executive vice president, is client contact.

## Tomlin Properties Inc.

5001 Spring Valley Road, Suite 1000-East, Dallas, Texas 75244-3910; (214) 239-8041

| | |
|---|---|
| Total assets managed | $580,000,000 |
| Tax-exempt assets managed | $80,000,000 |
| Real estate assets managed | $80,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 6 |
| Types of accounts managed | C |
| No. of portfolio managers | 5 |
| Size of research staff | 6 |

Tomlin Properties Inc. is a predevelopment real estate manager. It researches the primary growth corridors in Los Angeles, Phoenix, Dallas, Houston, Atlanta and Washington, identifying important properties in those paths for possible acquisition. Once acquired, aggressive management is applied to improve the development timeframe and increase value.

Clients include Texas Instruments.

Dan O. Tomlin Jr., chairman, is chief investment officer; George M. Dishman, managing partner, is client contact.

## Toronto Investment Management

26 Wellington St. E., Suite 900, Toronto, Ontario M4S 1C6; (416) 865-0731

| | |
|---|---|
| Total assets managed | $2,990,000,000 |
| Tax-exempt assets managed: | |
| Total | $2,392,000,000 |
| For subsidiaries of U.S. firms | $1,129,000,000 |
| Real estate assets managed | $38,000,000 |
| Non-North American assets | $32,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 78 |
| U.S. subsidiaries | 26 |
| Types of accounts managed | CGU |
| No. of portfolio managers | 11 |
| Size of research staff | 2 |

Toronto Investment Management, a Canadian firm, is a conservative balanced manager that also offers specialty management in aggressive equities, fixed income, non-North American equities, real estate and venture capital.

Its equity approach uses fundamental analysis with an emphasis on growth and low p/e stocks and market timing. Portfolios are value-oriented.

Its fixed-income approach is fundamentally oriented to economic and credit market research, and includes interest rate anticipation. Extensive use is made of computer analysis and spread trading analysis. Value is added through trades in coupon sector, quality and yield curve.

It follows 70 stocks closely and 125, generally; 60% of research is generated internally.

The parent company is AMI Asset Management International Inc.

Gary Kondrat, vice president, is chief investment officer; Tania Murenko, vice president-corporate development, is client contact.

## Touche Remnant Investment Management Ltd.

Mermaid House, 2 Puddle Dock, London, EC4V 3AT, U.K.; 01-236-6565

| | |
|---|---|
| Total assets managed | $1,540,000,000 |
| Tax-exempt assets managed | $8,000,000 |
| International assets managed | $8,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 1 |
| Types of accounts managed | C |
| No. of portfolio managers | 33 |

Touche Remnant Investment Management Ltd., formerly Touche Remnant Pension Fund Management Ltd., is an equity, balanced, real estate and international manager.

Its equity approach is active, international and top-down, emphasizing asset allocation among major world markets. Stock selection emphasizes value buying.

Options are used.

The fixed-income portions of balanced accounts use interest rate anticipation and sector analysis.

In real estate, properties are selected for both income and capital growth.

The parent company is Touche Remnant Holdings Ltd.

William Vincent, managing director, is chief investment officer; Deborah Hootman is client contact at (212) 758-6040.

## Tower Capital Management

30 Tower Lane, Avon, Conn. 06001; (203) 674-8800

| | |
|---|---|
| Total assets managed | $55,060,000 |
| Tax-exempt assets managed | $50,000,000 |
| Tax-exempt clients | 7 |
| Types of accounts managed | CJ |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Tower Capital Management Inc., an equity manager, uses a conservative growth approach, investing in high-quality growth and emerging growth companies.

The firm follows 100 stocks closely and 300, generally; 75% of research is generated internally.

Robert C. Knight, managing director, is chief investment officer; Roy C. McKay, managing director, is client contact.

## Towneley Capital Management Inc.

144 E. 30 St., New York, N.Y. 10016; (212) 696-4130

| | |
|---|---|
| Total assets managed | $950,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $20,000,000 |
| No. of portfolio managers | 1 |
| Size of research staff | 4 |

Towneley Capital Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented, using low p/e stocks and Graham & Dodd analysis.

Its fixed-income approach focuses on short-term maturity (five to seven years) and high quality.

The firm generates 95% of its research internally.

Wesley G. McCain, chairman, is chief investment officer; Sigrid Hess, vice president, is client contact.

## Townsend Asset Management Co. Inc.

45 Essex St., Hackensack, N.J. 07643; (201) 646-1511

| | |
|---|---|
| Total assets managed | $26,000,000 |
| Tax-exempt assets managed | $1,000,000 |
| Minimum separate account | $50,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | CF |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

Townsend Asset Management Co. Inc. is an equity, fixed-income and balanced manager.

Its equity approach is to purchase shares of small companies with below-average financial leverage relative to peer industry companies when available at prices less than their intrinsic, private worth.

Its fixed-income approach is passive with interest rate bets tightly controlled.

It follows 50 stocks closely and 100, generally; 90% of research is generated internally.

James W. Townsend is chief investment officer and client contact.

## Trafalgar Capital Management

401-277 Lakeshore Road East, Oakville, Ontario L6J 1H9; (416) 842-5310

| | |
|---|---|
| Total assets managed | $410,000,000 |
| Tax-exempt assets managed: | |
| Total | $410,000,000 |
| For subsidiaries of U.S. firms | $236,000,000 |
| Indexed assets managed | $192,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 39 |
| U.S. subsidiaries | 3 |
| Types of accounts managed | CGU |
| No. of portfolio managers | 6 |

Trafalgar Capital Management, a Canadian firm, is an equity, fixed-income, balanced, real estate and tactical asset allocation manager.

Its equity and fixed-income approaches are passive. Quantitative methods are used.

In real estate, it creates value through development or rehabilitation.

Clients include Ontario Municipal Employees, Chrysler Canada, Union Gas and GTE Investment.

Tristram S. Lett, president, is chief investment officer and client contact.

## Transamerica Investment Services Inc.

1150 S. Olive St., Los Angeles, Calif. 90015; (213) 742-3553

| | |
|---|---|
| Total assets managed | $12,367,000,000 |
| Tax-exempt assets managed | $6,188,000,000 |
| Real estate assets managed | $545,000,000 |
| International assets managed | $114,000,000 |
| Index funds managed | $47,000,000 |
| Types of accounts managed | C |
| No. of portfolio managers | 11 |
| Size of research staff | 7 |

Transamerica Investment Services Inc. is an equity, fixed-income and GIC manager.

The asset mix Jan. 1 was 3% stocks, 84% bonds, 5% cash, 0.5% equity real estate and 7.5% mortgages; $22 million was in foreign stocks, $91 million was in foreign bonds and $47 million was in equity indexed funds.

The parent company is Transamerica Corp.

Gary V. Rolle, executive vice president, is chief investment officer; Susan A. Silbert, senior vice president, is client contact.

## Trascott, Alyson, Craig Inc.

222 Cedar Lane, P.O. Box 278, Teaneck, N.J. 07666; (201) 836-9000

| | |
|---|---|
| Total assets managed | $25,000,000 |
| Tax-exempt assets managed | $10,000,000 |
| Minimum separate account | $200,000 |
| Tax-exempt clients | 11 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |

Trascott, Alyson, Craig Inc. is an equity, fixed-income and balanced manager.

Its equity approach is contrarian and uses Graham & Dodd analysis. Its fixed-income approach is based on interest rate anticipation, generally maintaining short duration.

It follows 100 stocks closely and 200 generally; 75% of research is generated internally.

Tracy Shagin, vice president, is chief investment officer and client contact.

## The Travelers Cos.

1 Tower Square — 7MS, Hartford, Conn. 06183; (203) 277-2150

| | |
|---|---|
| Total assets managed | $54,000,000,000 |
| Tax-exempt assets managed: | |
| Total | $24,686,000,000 |
| Pooled accounts | $4,320,000,000 |
| Separate accounts | $56,000,000 |
| GICs | $9,056,000,000 |
| Annuities | $3,393,000,000 |
| Other | $7,861,000,000 |
| Real estate assets managed | $535,000,000 |
| International assets managed | $227,000,000 |
| Indexed assets managed | $138,000,000 |
| Dedicated assets managed | $8,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 1,403 |
| Types of accounts managed | CEFGJ |

The Travelers Cos. is an equity, fixed-income, balanced, real estate, international, GIC, annuities, options and futures, portfolio insurance, direct placement, asset allocation and timberland manager.

Separate account equity management is provided through subsidiaries Dillon, Read Capital and Travelers Investment Management; fixed-income management is provided through subsidiaries Travelers Keystone and Travelers Cos.' securities department.

The subsidiaries manage some commingled funds for the parent that are included in the data above. Assets listed for the subsidiaries, which are profiled separately, do not include these commingled assets.

Its real estate approach is to maintain objectives via 100% ownership, all-cash investments and an emphasis on high cash-yielding properties.

Options, stock index futures and fixed-income futures are used.

The insurer follows 250 stocks closely and 1,500, generally; 25% of research is generated internally.

It provides portfolio insurance on $26 million in assets.

Clients include Equifax and BDM.

The parent is The Travelers Corp.

Richard Shima, executive vice president, is chief investment officer; B. Thomas Willison, vice president, is client contact.

## Travelers Asset Management International

1 Tower Square — 10PB, Hartford, Conn. 06183-2030; (203) 954-0766

| | |
|---|---|
| Total assets managed | $350,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $2,000,000 |
| No. of portfolio managers | 6 |
| Size of research staff | 14 |

Travelers Asset Management International Corp. is a fixed-income, balanced, international and GIC manager.

It offers active, passive or asset/liability management fixed-income approaches in domestic and international capital markets. It focuses on total return through quality and sector swaps and credit analysis. Options and fixed-income futures are used.

All research is generated internally.

The parent is The Travelers Corp.

Anne Melissa Dowling, vice president and chief investment officer, is client contact.

## Travelers Investment Management Co.

Northeast Plaza, 90 State House Square Suite 1200, Hartford, Conn. 06103-3796; (203) 277-4158

| | |
|---|---|
| Total assets managed | $1,551,000,000 |
| Tax-exempt assets managed | $771,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 7 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 7 |
| Size of research staff | 2 |

Travelers Investment Management Co. is an equity, fixed-income, international, index, portfolio insurance and options overwriting manager.

Its active equity approach seeks to identify fundamental value through a dividend discount model. Systematic quantitative disciplines are used in tactical asset allocation and security selection. Domestic and international index funds are offered.

Its risk management group engages in hedged and domestic and international index-related investment strategies using derivative instruments to protect equity portfolios and hedge foreign currency risk.

Fixed-income capabilities include management of an index fund tracking the Salomon Brothers BIG index.

In addition to the assets above, $299 million is managed in an options overwriting program. Travelers Investment Management also manages commingled accounts for The Travelers Insurance Co.

The asset mix Jan. 1 was 85% stocks and 15% cash.

The parent company is The Travelers Corp.

David M. Dunford, president, is chief investment officer; Kent A. Kelley, executive vice president, is client contact.

### Travelers Keystone Fixed Income Advisors

1 Tower Square — 7MS, Hartford, Conn. 06183; (203) 277-2997

| | |
|---|---|
| Total assets managed | $210,000,000 |
| Tax-exempt assets managed | $210,000,000 |
| Real estate assets managed | $5,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 6 |
| Types of accounts managed | CJ |
| No. of portfolio managers | 6 |
| Size of research staff | 4 |

Travelers Keystone Fixed Income Advisors, a high-grade and high-yield bond manager, emphasizes interest rate anticipation with a secondary focus on return enhancement through quality and sector swaps and credit analysis.

The parent company is The Travelers Corp. In addition to the assets above, Travelers Keystone manages some commingled funds for its parent.

Tom Drumm, director, is chief investment officer; John Prom, second vice president, is client contact.

### Treasury Asset Management

277 Park Ave., New York, N.Y. 10172; (212) 310-4500

See entry for THE CHEMICAL INVESTMENT GROUP.

### Trendstat Capital Management Inc.

10733 Sunset Office Drive, No. 355, St. Louis, Mo. 63127-1072; (314) 822-3500

| | |
|---|---|
| Total assets managed | $40,000,000 |
| Tax-exempt assets managed | $18,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 44 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

Trendstat Capital Management Inc. is an equity, fixed-income, balanced, hedging and mutual fund-timing manager.

Its equity approach is based on emerging growth and low p/e stocks, using econometric models and reducing risk through market timing, statistical screens, stop-losses and options/futures hedging. Its fixed-income approach uses econometric models of long-term bonds and interest rates to reduce risk and time the market.

Thomas F. Basso is chief investment officer and client contact.

### Trevor Stewart Burton & Jacobsen Inc.

90 Park Ave., New York, N.Y. 10016; (212) 972-8150

| | |
|---|---|
| Total assets managed | $400,000,000 |
| Tax-exempt assets managed | $300,000,000 |
| Minimum separate account | $2,000,000 |
| Tax-exempt clients | 40 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 3 |

Trevor Stewart Burton & Jacobsen Inc., an asset allocator, also manages equity and fixed-income portfolios.

The firm follows 50 stocks closely and 400 generally.

Paul W.H. Trevor, chairman, is chief investment officer; Karl E. Schoeller, executive vice president, is client contact.

### Triangle Portfolio Associates

1 Oxford Center, 301 Grant St., Suite 3310, Pittsburgh, Pa. 15219; (412) 234-1741

| | |
|---|---|
| Total assets managed | $100,000,000 |
| Tax-exempt assets managed | $100,000,000 |
| Minimum separate account | $7,500,000 |
| Tax-exempt clients | 5 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Triangle Portfolio Associates, an equity manager, takes an active and quantitative approach, using systematic factor methods. Portfolios are constructed to provide superior performance by maximizing exposure to mispriced segments of the market.

The parent company is Mellon Bank.

Aruna S. Ramamurti, president, is chief investment officer and client contact.

### Trident Investment Management Inc.

888 S. West St., Suite 500, Anaheim, Calif. 92802; (714) 999-6811 or (800) 255-2124

| | |
|---|---|
| Total assets managed | $720,000,000 |
| Tax-exempt assets managed | $685,000,000 |
| Real estate assets managed | $221,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 21 |
| Types of accounts managed | CFJG |
| No. of portfolio managers | 4 |
| Size of research staff | 3 |

Trident Investment Management Inc. is an equity, fixed-income, balanced, real estate and preferred cash manager.

Its equity approach uses a disciplined process to select high-quality stocks with a p/e less than the S&P average. In-house macroeconomic assumptions determine return expectations. Options are used.

Fixed-income portfolios use only high-quality governments and A+ corporates. Active management using interest rate anticipation, yield curve analysis and computer modeling of short-term price movements enhances returns.

Real estate investments focus on select, high-quality properties nationwide whose returns are calculated to provide high current income and capital appreciation.

The asset mix Jan. 1 was 26% stocks, 39% bonds, 4% cash, 20% equity real estate, 6% mortgages and 5% mortgage-backed securities.

The parent company is Pacific Inland Bancorp.

Sidney Hansen, president and chief executive officer, is chief investment officer and client contact.

### Trinity Advisors Corp.

600 N. Pearl, Suite 350 LB142, Dallas, Texas 75201; (214) 871-1601

| | |
|---|---|
| Total assets managed | $159,000,000 |
| Tax-exempt assets managed | $159,000,000 |
| Real estate assets managed | $159,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | C |
| No. of portfolio managers | 1 |

Trinity Advisors Corp., a real estate manager, emphasizes experienced acquisition and portfolio management of strategically located investment-quality real property exhibiting above-average income and value growth potential.

Clients include Eastern Air Lines.

Mark D. Wentz III is chief investment officer and client contact.

### Trinity Investment Management Corp.

10 Tremont St., Boston, Mass. 02108; (617) 742-9525

| | |
|---|---|
| Total assets managed | $3,586,000,000 |
| Tax-exempt assets managed | $3,553,000,000 |
| 401(k)/457 assets managed | $3,000,000 |
| 401(k)/457 clients | 1 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 93 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 15 |
| Size of research staff | 10 |

Trinity Investment Management Corp. is a quantitative equity manager emphasizing Graham & Dodd analysis, low p/e stocks and sector rotation.

Portfolio buys/sells are selected primarily by a composite ranking of eight proven submodels, such as dividend discount and cash flow plowback.

The asset mix Jan. 1 was 98.5% stocks and 1.5% cash.

The firm follows 736 stocks closely; all research is generated internally.

Clients include General Foods, The Common Fund, Pennsylvania and Milwaukee Building Trades.

Stanford Calderwood, chairman, is chief investment officer and client contact.

### Trusco Capital Management

50 Hurt Plaza, Suite 1400, Atlanta, Ga. 30303; (404) 586-6450

| | |
|---|---|
| Total assets managed | $4,500,000,000 |
| Tax-exempt assets managed | $4,500,000,000 |
| 401(k)/457 assets managed | $250,000,000 |
| 401(k)/457 clients | 21 |
| Tax-exempt clients | 201 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 11 |
| Size of research staff | 6 |

Trusco Capital Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach is bottom-up, screening a large universe of stocks for investment based on valuation levels and earnings trends.

Its fixed-income approach relies on active management and adds value by identifying and acting on opportunity and risk. Value is added by yield curve analysis, sector swaps and arbitrage activity. Options are used.

The asset mix Jan. 1 was 55% stocks, 37% bonds and 8% cash.

The parent company is Trust Company Bank.

Lawrence J. Trotti, president, is chief investment officer. The client contacts are Paul L. Robertson III and Bob M. Farmer, vice presidents, and John T. Hoyle, associate.

### Trust Co. of the West

400 S. Hope St., Los Angeles, Calif. 90071; (213) 683-4000

| | |
|---|---|
| Total assets managed | $11,145,000,000 |
| Tax-exempt assets managed: | |
| Total | $10,306,000,000 |
| Commingled | $3,218,000,000 |
| Separate | $7,088,000,000 |
| Real estate assets managed | $1,441,000,000 |
| International assets managed | $3,000,000 |
| Dedicated assets managed | $242,000,000 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients: | |
| Commingled | 189 |
| Separate | 69 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 19 |
| Size of research staff | 26 |

Trust Co. of the West is an equity, fixed-income, balanced, real estate, international, oil/gas, private placement, special credits and convertibles manager.

Its equity approach employs sector rotation, using top-down analysis with the goal of identifying changes before they are generally perceived and shifting between asset categories and industries to take advantage of change.

Its fixed-income approach uses interest rate anticipation and is top-down with a goal to catch cyclical shifts in interest rates. Options are used.

Its real estate equity investments are in existing properties, forward commitments and convertible mortgages in office, industrial and shopping centers in 40 major metropolitan areas.

The asset mix Jan. 1 was 43% stocks, 18% bonds, 4% cash, 14% equity real estate and 21% other; $3 million was in foreign stocks.

Ernest O. Ellison, president, is chief investment officer; Thomas E. Larkin Jr., managing director, is client contact.

### Trustcorp Bank, Ohio

3 Seagate, Toledo, Ohio 43603; (419) 259-6142

| | |
|---|---|
| Total assets managed | $2,800,000,000 |
| Tax-exempt assets managed: | |
| Total | $857,000,000 |
| Commingled | $331,000,000 |
| Separate | $526,000,000 |
| 401(k)/457 assets managed | $45,000,000 |
| 401(k)/457 clients | 45 |
| International assets managed | $7,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 987 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 12 |

Trustcorp Bank, Ohio, formerly Toledo Trust Co., is an equity, fixed-income, balanced, real estate and international/global manager.

Its equity approach is growth stock and quantitative-oriented. Its fixed-income approach uses interest rate anticipation, concentrating on high current income and investments in intermediate maturities.

The asset mix Jan. 1 was 18% stocks, 65% bonds and 17% cash; $5 million was in foreign stocks and $2 million, in foreign bonds.

The parent company is Trustcorp Bank Inc.

Theodore T. Hahn, senior vice president, is chief investment officer; Julie B. Higgins, senior vice president, is client contact.

### Trustcorp Bank, South Bend

P.O. Box 6, South Bend, Ind. 46624; (219) 237-5301

| | |
|---|---|
| Total assets managed | $305,000,000 |
| Tax-exempt assets managed: | |
| Total | $135,000,000 |
| Commingled | $32,000,000 |
| Separate | $103,000,000 |
| Real estate assets managed | $7,000,000 |
| Dedicated assets managed | $2,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 205 |
| Separate | 115 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 3 |

Trustcorp Bank, South Bend is an equity, fixed-income and balanced manager.

Its equity approach is based on earnings stability, earnings momentum, management skill and financial strength. Options are used.

Its fixed-income approach uses interest rate anticipation, with management based upon yield curve analysis, projected return curve analysis and spread analysis.

The parent company is Trustcorp.

James L. Lothary, vice president-trust investments, is chief investment officer; David Hosinski, senior vice president, is client contact.

### TSA Capital Management

700 Wilshire Blvd., Los Angeles, Calif. 90017; (213) 614-7151

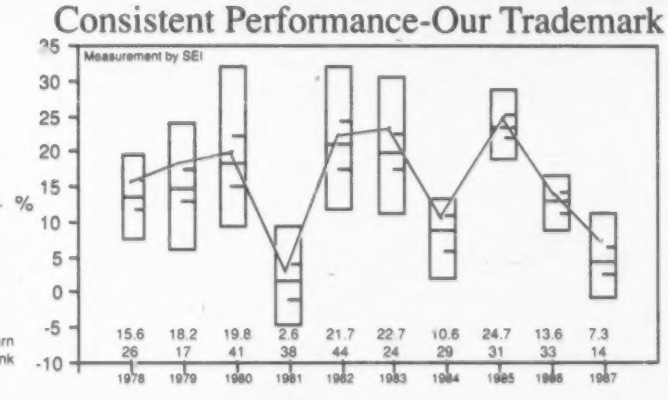
| | |
|---|---|
| Total assets managed | $2,214,000,000 |
| Tax-exempt assets managed | $2,214,000,000 |
| Minimum separate account | $20,000,000 |
| Tax-exempt clients | 20 |
| Types of accounts managed | CEG |
| No. of portfolio managers | 8 |
| Size of research staff | 4 |

TSA Capital Management is an equity and balanced manager.

Its equity approach is disciplined and pragmatic. A number of proprietary quantitative disciplines are used for security valuation and for measurement


Toronto Investment Management

Consistent Performance-Our Trademark

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of risk levels. Stock index and fixed-income futures are used.

The asset mix Jan. 1 was 61% stocks, 38% bonds and 1% cash.

It follows 300 stocks closely and 1,000 generally.

The parent company is Trust Services of America.

Roger G. Clarke is chief investment officer and managing director; Richard Boling, managing director, is client contact.

### Tucker Anthony Management Corp.

1 Beacon St., Boston, Mass. 02108; (617) 725-2221

| | |
|---|---|
| Total assets managed | $3,300,000,000 |
| Tax-exempt assets managed | $150,000,000 |
| Real estate assets managed | $5,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 9 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 7 |
| Size of research staff | 4 |

Tucker Anthony Management Corp. is an equity, fixed-income and balanced manager.

Its disciplined equity approach combines quantitative models with human judgment to produce portfolios with low p/es, high yields and low betas.

Its fixed-income approach combines an investment-grade core with limited high-yield or international holdings. Interest rate risk is controlled.

The parent is John Hancock Insurance Co.

Richard V. Howe is chief investment officer; Michael R. Mach is client contact.

### Tukman Capital Management

60 E. Sir Francis Drake Blvd., Larkspur, Calif. 94939; (415) 461-6833

| | |
|---|---|
| Total assets managed | $300,000,000 |
| Tax-exempt assets managed | $250,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 20 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 2 |

Tukman Capital Management, an equity manager, is value-oriented, focusing on highly profitable, cash-generating companies purchased at moderate p/e ratios.

The firm follows 40 stocks closely and 100 generally; all research is generated internally.

Clients include USAir, San Diego Gas & Electric, Harvey Mudd College and Harcourt, Brace, Jovanovich.

Melvin T. Tukman, president, is chief investment officer.

Daniel L. Grossman, vice president, is client contact.

## U

### UBS Phillips & Drew International Investment

Triton Court, 14 Finsbury Square, London, EC2A 1PD U.K.; 01-588-7114

| | |
|---|---|
| Total assets managed | $6,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $5,000,000 |
| No. of portfolio managers | 4 |
| Size of research staff | 8 |

UBS Phillips & Drew International Investment Ltd. is an international equity and fixed-income manager.

Its value-oriented equity approach is based on fundamental analysis of macroeconomic and company-specific factors, focusing on stocks selling at below-market valuations with sound or improving fundamentals and strong growth potential.

Its fixed-income approach is based on interest rate anticipation, using fundamental analysis of worldwide macroeconomic factors to determine duration and sector diversification.

The parent company is Union Bank of Switzerland.

James P. McCaughan, president, is chief investment officer; George M. Jamgochian, senior vice president, is client contact at (212) 319-2009.

### Unified Management Corp.

429 N. Pennsylvania, Indianapolis, Ind. 46204-1897; (317) 634-3300

| | |
|---|---|
| Total assets managed | $375,000,000 |
| Tax-exempt assets managed | $10,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 5 |
| Types of accounts managed | CF |
| No. of portfolio managers | 3 |
| Size of research staff | 6 |

Unified Management Corp. is an equity and fixed-income manager.

Its equity approach emphasizes growth and low p/e stocks. Its fixed-income approach is based on interest rate anticipation. Options are used.

The firm follows 100 stocks closely and 3,000, generally; 75% of research is generated internally.

The parent company is Mutual of New York.

Nicholas F. Kaiser, president, is chief investment officer; Ronald L. Keller, senior vice president, is client contact.

### Union Capital Management

1100 Poydras St., Suite 2900, New Orleans, La. 70163; (504) 585-7320

| | |
|---|---|
| Total assets managed | $33,000,000 |
| Tax-exempt assets managed | $33,000,000 |
| Real estate assets managed | $23,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 5 |
| Types of accounts managed | G |
| No. of portfolio managers | 1 |

Union Capital Management, a fixed-income manager, takes a passive approach through a stratified sampling that provides the most efficient method of replicating bond market returns. Limited emphasis is placed on interest rate forecasts.

Clients include Iberia Parish School Board and St. John the Baptist School Board.

Kenneth J. Canepa is chief investment officer and client contact.

### The Union Labor Life Insurance Co.

111 Massachusetts Ave. N.W., Washington, D.C. 20001; (202) 682-0900

| | |
|---|---|
| Total assets managed | $1,747,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,536,000,000 |
| Pooled accounts | $648,000,000 |
| GICs | $425,000,000 |
| Other | $463,000,000 |
| Real estate assets managed | $453,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 489 |
| Types of accounts managed | CGJ |
| No. of portfolio managers | 5 |
| Size of research staff | 7 |

The Union Labor Life Insurance Co. is an equity, fixed-income and balanced manager.

Its equity approach uses Graham & Dodd analysis to identify low-beta, out-of-favor and special situation stocks.

Its fixed-income approach uses interest rate anticipation on 25% of assets and active management — swapping between intermediate and longer maturities — on the remainder.

Its real estate Separate Account J invests in long-term first mortgages. About 25% of the portfolio has some form of participation in rents or other appreciation.

The separate account asset mix Jan. 1 was 15.9% stocks, 1.7% bonds, 6.1% cash, 60.6% mortgages, 9.3% mortgage-backed securities and 6.4% government securities.

The parent company is ULLICO Inc.

Herbert Canapary, vice president, is chief investment officer; John Stephan, director-group pension sales, is client contact.

### United Capital Management

1700 Broadway Suite 1700, Denver, Colo. 80274; (303) 831-9474

| | |
|---|---|
| Total assets managed | $3,930,000,000 |
| Tax-exempt assets managed | $3,755,000,000 |
| Minimum separate account | $35,000,000 |
| Tax-exempt clients | 30 |
| Types of accounts managed | CFJG |
| No. of portfolio managers | 4 |
| Size of research staff | 2 |

United Capital Management is an equity, fixed-income and balanced manager.

It is a contrarian/value equity investor, seeking price-depressed, out-of-favor stocks that have major rebound potential over three years. A strict sell discipline is followed.

Its fixed-income approach is active and long-term, focusing on major changes in interest rate trends. Business cycle analysis provides the framework for the rate outlook.

The asset mix Jan. 1 was 82% stocks, 12% bonds and 6% cash.

The firm follows 80 stocks closely and 120, generally.

The parent company is United Bank of Denver.

Clients include AT&T, Laborers National Pension Fund, General Public Utilities and Ralston Purina.

W. Lon Schreur, president, is chief investment officer; Denise Bryant, vice president, is client contact.

### United Investment Counsel

210 Newbury St., Boston, Mass. 02116; (617) 267-8855

| | |
|---|---|
| Total assets managed | $1,200,000,000 |
| Tax-exempt assets managed | $800,000,000 |
| Minimum separate account | $300,000 |
| Tax-exempt clients | 375 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 20 |
| Size of research staff | 35 |

United Investment Council is an equity, fixed-income and balanced manager.

Its equity approach uses Graham & Dodd analysis, focusing on growth and emerging growth stocks. The firm recommends a diversified portfolio of attractive securities in line with the client's objectives.

The fixed-income approach uses interest rate anticipation. The aim is to provide the security of capital and level of income — market conditions considered — commensurate with the goals of the client.

The asset mix Jan. 1 was 70% stocks, 20% bonds and 10% cash.

The firm follows 250 stocks closely and 750 generally; 80% of the research is generated internally.

The parent company is Babson United Investment Advisors Inc.

Donald G. Parsons is the chief investment officer; Cassie M. Grant, senior vice president, is the client contact.

### United Jersey Bank

223 Moore St., Hackensack, N.J. 07602; (201) 646-5230

| | |
|---|---|
| Total assets managed | $650,000,000 |
| Tax-exempt assets managed: | |
| Total | $424,000,000 |
| Commingled | $200,000,000 |
| Separate | $224,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients: | |
| Commingled | 365 |
| Separate | 100 |
| Types of accounts managed | CFJ |
| No. of portfolio managers | 7 |
| Size of research staff | 3 |

United Jersey Bank is an equity, fixed-income and balanced manager.

Its equity approach uses low p/e stocks, and may vary the capitalization stressed over long cycles. Sector rotation is used. Its fixed-income approach uses interest rate anticipation and sector analysis. Investment-grade securities are used as alternatives to Treasuries on a relative basis.

The parent company is United Jersey Banks.

John W. Gustafson, senior vice president, is chief investment officer; Cos D'Andrea, vice president, is client contact.

### United Missouri Investment Counsel Service

P.O. Box 226, Kansas City, Mo. 64141; (816) 556-7340

| | |
|---|---|
| Total assets managed | $3,460,000,000 |
| Tax-exempt assets managed: | |
| Total | $2,350,000,000 |
| Commingled | $330,000,000 |
| Separate | $2,020,000,000 |
| 401(k)/457 assets managed | $90,000,000 |
| 401(k)/457 clients | 78 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 295 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 12 |
| Size of research staff | 5 |

United Missouri Investment Counsel Service is an equity, fixed-income, balanced and real estate manager.

Its equity approach focuses on investment in undervalued companies with strong balance sheet characteristics whose outlooks call for above-average unit growth with a product line that offers pricing flexibility.

Its fixed-income approach emphasizes maturity shifts based on the interest rate outlook. Key forecasting tools are related to manufacturing operating rates.

The asset mix Jan. 1 was 40% stocks, 40% bonds (including mortgage-backed securities) and 20% cash.

Clients include Shriners Hospital for Crippled Children, Missouri Local Government Employees and V.F. Corp.

The parent company is United Missouri Bank.

Stuart L. Murdock, executive vice president and senior investment officer, is chief investment officer; David B. Anderson, senior vice president and investment officer, is client contact.

### United of Omaha Life Insurance Co.

Mutual of Omaha Plaza, Omaha, Neb. 68175; (402) 978-5138

| | |
|---|---|
| Total assets managed | $3,211,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,267,000,000 |
| Pooled accounts | $7,000,000 |
| GICs | $639,000,000 |
| Annuities | $257,000,000 |
| Other | $364,000,000 |
| 401(k)/457 assets managed | $18,000,000 |
| International assets managed | $2,000,000 |
| Minimum separate account | $10,000 |
| Tax-exempt clients | 7 |
| Types of accounts managed | CGJ |
| No. of portfolio managers | 3 |
| Size of research staff | 10 |

United of Omaha Life Insurance Co. is an equity and fixed-income manager.

Its equity approach focuses on investment in established companies with strong earnings growth records.

Its fixed-income approach controls interest rate risk through duration matching and credit risk through extensive credit analysis.

All separate account assets were in stocks Jan. 1; $2 million was in foreign stocks.

The parent company is Mutual of Omaha.

John L. Maginn, treasurer, is chief investment officer; John Fischer, assistant vice president-group pensions, is client contact.

### United States National Bank of Galveston

P.O. Box 179, Galveston, Texas 77553; (409) 763-1151

| | |
|---|---|
| Total assets managed | $433,000,000 |
| Tax-exempt assets managed: | |
| Total | $213,000,000 |
| Commingled | $40,000,000 |
| Separate | $173,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 220 |
| Separate | 133 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

United States National Bank of Galveston is an equity, fixed-income and balanced manager.

A long-term investor, the bank uses a value-oriented equity approach. It seeks issues allowing considerable downside protection by providing comparatively high-dividend yields and low p/e multiples. Its fixed-income approach uses interest rate anticipation and sector analysis. Options are used.

The parent company is Cullen/Frost Bankers Inc.

Linford O. Kauffman is chief investment officer; Freddie B. Meier, senior vice president and trust officer, is client contact.

### United States National Bank in Johnstown

Main & Franklin streets, Johnstown, Pa. 15901; (814) 533-5397

| | |
|---|---|
| Total assets managed | $119,000,000 |
| Tax-exempt assets managed: | |
| Total | $86,000,000 |
| Commingled | $2,000,000 |
| Separate | $84,000,000 |
| Real estate assets managed | $10,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 45 |
| Separate | 67 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 2 |

United States National Bank in Johnstown is an equity, fixed-income and balanced manager.

Its equity approach uses a bottom-up method emphasizing individual stock selection based upon a fundamental value orientation. Its fixed income approach emphasizes laddering maturities within sector diversification.

The parent is U.S. Bancorp Inc.

Judith A. Duchene, vice president, is chief investment officer; John H. McGrail, senior vice president, is client contact.

### United States Trust Co. (Boston)

40 Court St., Boston, Mass. 02108; (617) 726-7250

| | |
|---|---|
| Total assets managed | $1,013,000,000 |
| Tax-exempt assets managed: | |
| Total | $537,000,000 |
| Commingled | $234,000,000 |
| Separate | $413,000,000 |
| 401(k)/457 assets managed | $103,000,000 |
| 401(k)/457 clients | 103 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 105 |
| Separate | 94 |
| Types of accounts managed | CEFGJ |
| No. of portfolio managers | 8 |

United States Trust Co. (Boston) is an equity and balanced manager that offers socially screened portfolios.

Its equity philosophy combines a top-down approach to sector allocation and a value-oriented approach to stock selection. Market timing is used.

The asset mix Jan. 1 was 48% stocks, 51% bonds and 1% cash.

The bank follows 100 stocks closely and 300 generally; 75% of research is generated internally.

Clients include Massachusetts PRIT, Massachusetts State Carpenters and Harvard Community Health Plan.

The parent company is UST Corp.

Domenic Colasacco is chief investment officer; Robert Lincoln is client contact.

### U.S. Trust Co. of California

555 S. Flower St. Suite 2700, Los Angeles, Calif. 90071-2429; (213) 488-4000

| | |
|---|---|
| Total assets managed | $427,000,000 |
| Tax-exempt assets managed | $135,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 27 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 5 |
| Size of research staff | 2 |

U.S. Trust Co. of California, formerly Summit Management Co., is an equity, fixed-income and balanced manager.

Its equity approach is based on sector rotation, concentrating in sectors responding to current market themes and undergoing substantial price revaluation.

Its fixed-income approach is based on interest rate anticipation and emphasizes maturity selection, credit analysis and use of undervalued or overlooked opportunities.

The parent is U.S. Trust Corp.

Robert M. Raney, managing director, is chief investment officer; John S. DeGroot, senior vice president, is client contact.

### United States Trust Co. of New York

45 Wall St., New York, N.Y. 10005; (212) 806-4500

| | |
|---|---|
| Total assets managed | $14,037,000,000 |
| Tax-exempt assets managed: | |
| Total | $3,507,000,000 |
| Commingled | $928,000,000 |
| Separate | $1,579,000,000 |
| Real estate assets managed | $34,000,000 |
| International assets managed | $50,000,000 |
| Dedicated assets managed | $250,000,000 |

Key to abbreviations

C: Corporate account
E: Educational endowments
F: Private foundations
G: U.S. state and local gov'ts
J: Jointly trusteed
P: Canadian provincial gov'ts
U: Unions (Canadian firms only)

| | |
|---|---|
| Minimum separate account | $2,000,000 |
| Commingled | 4 |
| Separate | 125 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 45 |
| Size of research staff | 7 |

United States Trust Co. of New York is an equity, fixed-income, balanced, real estate and global/international manager.

Its equity approach is to buy and hold assets that have demonstrated value in terms of underlying resources and assets or earnings potential, and are favorably priced.

Economic analysis, both domestic and international, is the most critical factor in its fixed-income approach. Yield curve analysis plays a vital role in selection and maturity. Credit analysis and changing yield spread relationships affect quality and sector distribution decisions. Options are used.

Its real estate approach consists of buying predevelopment land for cash. The holding period averages five years.

The asset mix Jan. 1 was 31% stocks, 67% bonds, 1% cash and 1% equity real estate; $30 million was in foreign stocks.

The parent company is United States Trust Co.

Frederick B. Taylor, chairman-investment policy, is the chief investment officer; Preston S. Smith, vice president, is the client contact.

### United Trust Fund

4770 Biscayne Blvd., Miami, Fla. 33137; (305) 576-7711

| | |
|---|---|
| Total assets managed | $215,000,000 |
| Tax-exempt assets managed | $0 |
| No. of portfolio managers | 7 |
| Size of research staff | 3 |

United Trust Fund is a fixed-income and real estate manager.

Its fixed-income approach is passive, taking long-term, fixed-rate securities or other credit instruments and making continuous investment without regard to market timing in a flat-rate market. In an escalating market, it will go short and roll. Fixed-income futures are used.

Its real estate approach is guaranteed return through credit leases.

James Nolan is chief investment officer and client contact.

### Unity Management Inc.

2001 Marcus Ave., Lake Success, N.Y. 11042; (516) 437-2200

| | |
|---|---|
| Total assets managed | $560,000,000 |
| Tax-exempt assets managed | $560,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 67 |
| Types of accounts managed | CJG |
| No. of portfolio managers | 7 |
| Size of research staff | 3 |

Unity Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach combines growth and low p/e stocks, and market timing. In-house computer systems and traditional research sources are used for fundamental and technical analysis.

Its fixed-income approach is established through conventional and computer-generated interest rate forecasts. Bond swapping and immunization programs are used for restructuring asset allocations.

The asset mix Jan. 1 was 25% stocks, 35% bonds and 40% cash.

The firm follows 250 stocks closely and 2,000, generally; 75% of the research is generated internally.

Irving Decter is chief investment officer; Kenneth Decter is the client contact.

### UNUM Life Insurance

2211 Congress St., Portland, Maine 04122; (207) 770-3765

| | |
|---|---|
| Total assets managed | $6,571,000,000 |
| Tax-exempt assets managed: | |
| Total | $3,841,000,000 |
| Separate accounts | $51,000,000 |
| GICs | $1,226,000,000 |
| Annuities | $77,000,000 |
| Other | $2,487,000,000 |
| 401(k)/457 assets managed | $198,000,000 |
| Types of accounts managed | CE |
| No. of portfolio managers | 4 |
| Size of research staff | 20 |

UNUM Life Insurance is an equity, fixed-income, balanced, real estate and GIC manager.

Its equity approach emphasizes market timing within an emerging growth/growth stock strategy.

Its fixed-income approach focuses on sector analysis and is oriented toward private placements and commercial mortgages.

It uses options and fixed-income futures.

The separate account asset mix Jan. 1 was 87% stocks and 13% cash.

The insurer follows 100 stocks closely; 20% of research is generated internally.

Peter J. Moynihan, senior vice president, is chief investment officer.

## V

### VALIC

2929 Allen Parkway, Houston, Texas 77019; (713) 831-5066

| | |
|---|---|
| Total assets managed | $7,265,000,000 |
| Tax-exempt assets managed: | |
| Total | $7,064,000,000 |
| Pooled accounts | $475,000,000 |
| Annuities | $215,000,000 |
| Other | $6,374,000,000 |
| 401(k)/457 assets managed | $124,000,000 |
| 401(k)/457 clients | 300 |
| Index funds managed | $4,000,000 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 5 |
| Size of research staff | 5 |

VALIC is an equity, fixed-income and balanced manager.

The insurer has four equity funds: a growth stock fund that uses sector rotation on large-cap stocks; an emerging growth fund; a market-timing fund; and an index fund.

In fixed income, average maturity and duration are adjusted in response to the interest rate outlook.

Options and financial futures are used.

The separate account asset mix Jan. 1 was 98% stocks 1% bonds and 1% cash.

The insurer follows 75 stocks closely and 150, generally; 75% of research is generated internally.

Its clients include Shriners Hospital, Howard University and University of Arizona.

The parent is American General Corp.

L.M. Richard, vice president, is chief investment officer for separate accounts. Conway Shaw, second vice president-group marketing, is client contact.

### Valley Bank of Nevada

P.O. Box 98555, Las Vegas, Nev. 89193; (702) 386-1288

| | |
|---|---|
| Total assets managed | $926,000,000 |
| Tax-exempt assets managed: | |
| Total | $74,000,000 |
| Separate | $74,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 141 |
| Types of accounts managed | CEJ |
| No. of portfolio managers | 4 |
| Size of research staff | 1 |

Valley Bank of Nevada — Trust Division is an equity, fixed-income and balanced manager.

In equities, it offers passive and market timing/tactical asset allocation strategies. For fixed income, it applies interest rate anticipation and yield curve analysis using mutual funds.

The bank follows 24 stocks closely; 70% of research is generated internally.

The parent is Valley Capital Corp.

Blayne A. Ence, assistant vice president/manager-investments, is chief investment officer; Gary Blanchard, vice president, is client contact.

### Valley National Bank of Arizona

P.O. Box 71, Phoenix, Ariz. 85001; (602) 261-1545

| | |
|---|---|
| Total assets managed | $2,403,000,000 |
| Tax-exempt assets managed: | |
| Total | $574,000,000 |
| Separate | $574,000,000 |
| 401(k)/457 assets managed | $24,000,000 |
| 401(k)/457 clients | 24 |
| Real estate assets managed | $226,000,000 |
| Tax-exempt clients | 209 |
| Types of accounts managed | CGJ |
| No. of portfolio managers | 15 |
| Size of research staff | 3 |

Valley National Bank of Arizona is an equity, fixed-income, balanced and real estate manager.

Its equity approach is toward growth companies positioned to benefit from long-term trends; company fundamentals are analyzed through systematic relative valuation models. Options are used. Its fixed-income approach uses interest rate anticipation; sector selection adds incremental return.

In real estate, it concentrates on Arizona-based commercial mortgages with interest rate and call provisions; it offers an open-end fund.

The asset mix Jan. 1 was 20% stocks, 15% bonds, 20% cash, 1% equity real estate, 38% mortgages and 6% other.

The parent is Valley National Corp.

Lyle D. Wurtz, vice president and manager-trust investments, is chief investment officer; Paul Knowles, vice president and manager-trust employee benefits, is client contact.

### Value Line Asset Management

711 Third Ave., New York, N.Y. 10017; (212) 687-3965

| | |
|---|---|
| Total assets managed | $1,230,000,000 |
| Tax-exempt assets managed | $1,220,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 30 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 4 |
| Size of research staff | 3 |

Value Line Asset Management is an equity and balanced manager.

Its equity approach uses a quantitative discipline based on the firm's ranking system to identify stocks with above-average earnings growth and attractive valuations relative to the market and each stock's history. Sector rotation is employed.

The asset mix Jan. 1 was 89% stocks, 2% bonds and 9% cash.

The firm follows 1,700 stocks closely and 4,000 generally; 95% of research is generated internally.

The parent company is Value Line Inc.

Clients include Brunswick, GM and Ohio Police & Firemen.

Mark Tavel, president, is chief investment officer; Victor Ugolyn, director of marketing, is client contact.

### ValueQuest Ltd.

Roundy's Hill, Marblehead, Mass. 01945; (617) 631-5508

| | |
|---|---|
| Total assets managed | $141,000,000 |
| Tax-exempt assets managed | $118,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 3 |
| Types of accounts managed | CE |
| No. of portfolio managers | 3 |
| Size of research staff | 1 |

ValueQuest Ltd., a contrarian value equity manager, concentrates on the lower quintile of the market in undervalued earnings, assets and quality. It focuses on intrinsic value using a combination of screens and fundamental analysis; it uses a three-to-five year time horizon.

It follows 150 stocks closely; all research is generated internally.

Clients include 3M and University of Texas.

Katherine B. Magrath, partner, is chief investment officer and client contact.

### Vanbrit Investment Management

1100 Melville St., Suite 620, Vancouver, British Columbia V6E 4A6; (604) 687-1393

| | |
|---|---|
| Total assets managed | $122,000,000 |
| Tax-exempt assets managed: | |
| Total | $121,000,000 |
| For subsidiaries of U.S. firms | $0 |
| Non-North American assets | $3,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | CU |
| No. of portfolio managers | 2 |

Vanbrit Investment Management, a Canadian firm, is an equity, fixed-income, balanced and money market manager.

Its equity approach emphasizes growth stock and its fixed-income approach, interest rate anticipation.

The firm follows 100 stocks closely and 200, generally; 40% of research is generated internally.

The parent company is AMI Asset Management International Inc.

Larry Avant, president, is chief investment officer and client contact.

### Van Cleef, Jordan and Wood

230 Park Ave., Suite 910, New York, N.Y. 10169; (212) 986-2600

| | |
|---|---|
| Total assets managed | $240,000,000 |
| Tax-exempt assets managed | $170,000,000 |
| Minimum separate account | $500,000 |
| Types of accounts managed | CFJ |
| No. of portfolio managers | 6 |
| Size of research staff | 6 |

Van Cleef, Jordan and Wood Inc. is an equity, fixed-income and balanced manager.

The firm uses a stable growth, low risk, top-down/bottom-up value oriented approach to equity investing, coupled with industry sector rotation. Its active fixed-income management consists of shifting duration, maturity sector rotation and anticipation of quality upgrades and downgrades. Asset allocation is of primary importance in both approaches.

The asset mix Jan. 1 was 35% stocks, 55% bonds and 10% cash.

Richard F.F. Nichols Jr. is chief investment officer; George C. Brett is client contact.

### Van Deventer & Hoch

420 N. Brand Blvd., Glendale, Calif. 91203; (818) 247-5330

| | |
|---|---|
| Total assets managed | $1,118,000,000 |
| Tax-exempt assets managed | $483,000,000 |
| Minimum separate account | $200,000 |
| Tax-exempt clients | 539 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 20 |
| Size of research staff | 7 |

Van Deventer & Hoch, a balanced manager, takes a value-oriented approach to equities, investing in soundly managed businesses when available at a discount to true asset value.

Its fixed-income approach is passive. High-grade securities maturing in seven years or less are used for defensive purposes.

The firm follows 200 stocks closely; all research is generated internally.

The parent company is Chemical New York Corp.

Richard D. Trautwein, executive vice president, is chief investment officer; Richard A. Snyders, president, is client contact.

### Van Eck Associates Corp.

122 E. 42nd St., New York, N.Y. 10168; (212) 687-5200

| | |
|---|---|
| Total assets managed | $500,000,000 |
| Tax-exempt assets managed | $90,000,000 |
| International assets managed | $47,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 1 |
| Types of accounts managed | C |
| No. of portfolio managers | 4 |
| Size of research staff | 8 |

Van Eck Associates Corp. is an equity, fixed-income, balanced, international and gold-products manager.

Its equity approach emphasizes growth stocks, with gold investments used for prudent diversification and as a hedge against inflation. It follows global investment trends with appropriate hedging strategies. Its fixed-income approach uses interest rate anticipation and currency trends to judge the investment climate. Options and financial futures are used.

The parent is Van Eck Management Corp.

Klaus Buescher, president, is the chief investment officer; David Kenerson is client contact.

### The Vanguard Group

Vanguard Financial Center, Valley Forge, Pa. 19482; (215) 648-6000

| | |
|---|---|
| Total assets managed | $12,800,000,000 |
| Tax-exempt assets managed | $1,233,000,000 |
| Index funds managed | $478,000,000 |
| Minimum separate account | $25,000,000 |
| Types of accounts managed | CEFJG |

The Vanguard Group is an equity and fixed-income manager; additional equity and fixed-income and its balanced, real estate, international and GIC management is handled by external managers.

Vanguard has $27 billion in total assets; $12.8 billion is managed internally and $14.2 billion, externally. Of the total, $5.9 billion represents tax-exempt assets; $1.233 billion is managed internally and $4.7 billion, externally.

Its equity approach varies with a fund's investment objective. The approaches offered are passive, quantitative, growth, emerging growth and low p/e stocks. Graham & Dodd analysis is used.

The fixed-income strategy also varies by fund. Those used are passive or sector analysis.

Financial futures are used to hedge a fund's cash position.

Its real estate approach is to invest primarily in existing, income-producing commercial properties.

It handles, through internal and external management, $3 billion in assets


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The asset mix Jan. 1 was 38% stocks, 8% bonds and 54% cash; $470 million was in equity index funds and $8 million in bond index funds.

Clients include Burlington Industries, Digital Equipment, Schering-Plough and University of Pennsylvania.

John C. Bogle, chairman and chief executive officer, is chief investment officer; E.F. Bowditch Jr., senior vice president, is client contact.

### Vaughan, Nelson, Scarborough & McConnell

6300 Texas Commerce Tower, Houston, Texas 77002; (713) 224-2545

| | |
|---|---|
| Total assets managed | $2,175,000,000 |
| Tax-exempt assets managed | $1,950,000,000 |
| Minimum separate account | $2,500,000 |
| Tax-exempt clients | 52 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 6 |

Vaughan, Nelson, Scarborough & McConnell Inc. is an equity, fixed-income and balanced manager.

Its equity approach emphasizes a "middle 60%" strategy to downside protection and stable growth using individual issue selection through original primary research, active asset allocation and proprietary valuation analysis.

Its fixed-income approach is driven by interest rate anticipation and sector analysis.

The asset mix Jan. 1 was 50% stocks, 30% bonds and 20% cash.

The firm follows 50 stocks closely and 200 generally; 75% of research is generated internally.

Clients include Trinity University, Daniel Industries, Texas A&M Foundation and Wortham Foundation.

Eugene H. Vaughan Jr., president, is chief investment officer; Frank Scarborough, principal, is client contact.

### Verus Capital

45 Broadway, New York, N.Y. 10006; (212) 943-9200

| | |
|---|---|
| Total assets managed | $260,000,000 |
| Tax-exempt assets managed | $260,000,000 |
| International assets managed | $25,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 8 |
| Types of accounts managed | C |
| No. of portfolio managers | 3 |
| Size of research staff | 1 |

Verus Capital, an equity manager, looks for 20 to 30 special situations in the United States or abroad with unique fundamentals and attractive risk/reward valuation.

The firm follows 80 stocks closely and 500 generally; 60% of research is generated internally.

The parent company is Arnhold & S. Bleichroeder Inc.

Clients include Allied Signal, ITT, BASF and Public Service Electric & Gas.

Charles C. Reilly, president, is chief investment officer; Frederic C. Reynolds, vice president, is client contact.

### Virginia Investment Counselors Inc.

1300 Crestar Bank Building, Norfolk, Va. 23510; (804) 623-2491

| | |
|---|---|
| Total assets managed | $410,000,000 |
| Tax-exempt assets managed | $200,000,000 |
| Real estate assets managed | $10,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 120 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 4 |
| Size of research staff | 1 |

Virginia Investment Counselors Inc. is an equity, fixed-income and balanced manager.

Its equity approach is seeks low p/e stocks through sector rotation and market timing under Graham & Dodd principles. Its fixed-income approach combines interest rate anticipation and sector analysis. Options are used.

The firm follows 30 stocks closely and 400 generally; 50% of research is generated internally.

Frederick V. Martin, president, is chief investment officer; Henry Harris III, vice president, is client contact.

Public funds: Nov. 28.

## W

### Waddell & Reed Asset Management Co.

2400 Pershing Road, Kansas City, Mo. 64108; (816) 283-4093

| | |
|---|---|
| Total assets managed | $1,406,000,000 |
| Tax-exempt assets managed | $820,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 37 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 12 |
| Size of research staff | 19 |

Waddell & Reed Asset Management Co. is an equity, fixed-income, balanced and international manager.

Its equity approach uses asset allocation that is oriented to major market cycle changes. The degree of market participation is based on an analysis of price vs. intrinsic value relationships and the business cycle.

Its fixed-income approach uses interest-rate anticipation to actively manage portfolios. Its primary bond technique is to alter duration based on the outlook for interest rates within a duration range of one to 6.5 years.

The asset mix Jan. 1 was 30% stocks, 51% bonds and 19% cash.

The parent is Torchmark Corp.

Clients include Eastman Kodak, Major League Baseball Players' Association and Inland Steel.

Henry J. Herrmann, president, is chief investment officer; Jackson L. Allen Jr., vice president, is client contact.

### Wagner & Hamil Inc.

410 17th St., No. 840, Denver, Colo. 80202; (303) 892-6928

| | |
|---|---|
| Total assets managed | $22,000,000 |
| Tax-exempt assets managed | $2,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 5 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Wagner & Hamil Inc., an equity and balanced manager, Graham & Dodd analysis with an emphasis on growth stocks. Its fixed-income approach is passive.

The firm follows 40 stocks closely and 100, generally; 75% of research is generated internally.

Judith B. Wagner is chief investment officer; Carolyn H. Henderson is client contact.

### Wagstaff, Lodefink & Associates

136 E. South Temple, Suite 1740, Salt Lake City, Utah 84111; (801) 532-2777

| | |
|---|---|
| Total assets managed | $26,000,000 |
| Tax-exempt assets managed | $18,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 40 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 2 |
| Size of research staff | 1 |

Wagstaff, Lodefink & Associates is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented, using a bottom-up, growth stock style that stresses a total return concept. It uses low p/e, yield and risk-adjusted total rate of return screens.

Its fixed-income approach is based on interest rate anticipation.

It follows 50 stocks closely and 150 generally; 85% of research is generated internally.

David L. Lodefink, is chief investment officer; David J. Wagstaff, is client contact.

### Wall, Patterson, Hamilton & Allen Inc.

229 Peachtree St. N.E., Suite 900, Atlanta, Ga. 30043; (404) 659-6060

| | |
|---|---|
| Total assets managed | $1,230,000,000 |
| Tax-exempt assets managed | $1,154,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 130 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 6 |
| Size of research staff | 2 |

Wall, Patterson, Hamilton & Allen Inc. is an equity, fixed-income and balanced manager.

Its equity approach is based on selecting superior growth companies from a pre-screened universe based on earnings and valuation criteria.

Its fixed-income approach is based on yield curve analysis, using only Treasury and agency securities.

The asset mix Jan. 1 was 50.3% stocks, 34.4% bonds and 15.3% cash.

It follows 200 stocks closely; 95% of research is generated internally.

The parent company is United Asset Management.

Clients include Peoples Energy, BASF, Salvation Army and Michigan Carpenters.

James O. Patterson is chief investment officer; William M. Robertson, senior vice president, is client contact.

### Wall Street Associates

7863 Girard Ave., Suite 300, P.O. Box 8589; La Jolla, Calif. 92038-8589; (619) 454-3104

| | |
|---|---|
| Total assets managed | $102,000,000 |
| Tax-exempt assets managed | $94,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 10 |
| Types of accounts managed | C |
| No. of portfolio managers | 3 |

Wall Street Associates, an equity manager, uses a bottom-up selection process focusing on small-cap companies with strong fundamentals, rapidly accelerating earnings and attractive p/e valuations.

It follows 45 stocks closely and 45 generally; 10% of research is generated internally.

Clients include Pacific Enterprises, Intel and Home Federal.

William Jeffrey III, managing partner, is chief investment officer; John R. French, partner, is client contact.

### Warburg Investment Management International

787 Seventh Ave., New York, N.Y. 10019; (212) 459-7150

| | |
|---|---|
| Total assets managed | $1,564,000,000 |
| Tax-exempt assets managed | $1,243,000,000 |
| International assets managed | $1,146,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 26 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 10 |

Warburg Investment Management International Ltd. is an international and global equity and fixed-income manager.

Its equity approach combines top-down and bottom-up fundamental analysis with stocks analyzed against a number of criteria, including earnings growth, management and product strength.

Its fixed-income approach is based on top-down fundamental analysis with currency and bond investment decisions taken separately. Fixed-income futures are used.

On Jan. 1, bond portfolios were invested 80% in bonds and 20% in cash; equity portfolios were invested 63% in stocks and 37% in cash. As of the same date, $559 million was in foreign stocks, $169 million in foreign bonds and $418 million in cash.

The parent company is Mercury Asset Management Ltd.

Clients include Sun, Hercules and City and County of San Francisco.

Robert Michaelson is chief investment officer; Colin Clark is client contact for equity accounts and Carolyn Sykes is the contact for bond accounts.

### Warburg, Pincus Counsellors Inc.

466 Lexington Ave., New York, N.Y. 10017; (212) 878-0600

| | |
|---|---|
| Total assets managed | $3,429,000,000 |
| Tax-exempt assets managed | $1,282,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 144 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 11 |
| Size of research staff | 7 |

Warburg, Pincus Counsellors Inc. is an equity, fixed-income and balanced manager.

Its equity approach seeks growth and emerging growth stocks based on in-house research; it focuses on financially strong, moderate-size companies with superior earnings prospects.

Its fixed-income approach implements interest rate anticipation strategies, focusing on intermediate maturity securities.

The asset mix Jan. 1 was 50% stocks, 31% bonds and 19% cash.

It follows 225 stocks closely and 300 generally; 80% of research is generated internally.

The parent company is E.M. Warburg, Pincus & Co.

Clients include Gates Rubber, Long Island Railroad, Flagler Museum and Rockefeller Foundation.

John L. Furth is chief investment officer; Richard H. Klemm is client contact.

### Ward & Wissner Capital Management

99 Park Ave., New York, N.Y. 10016; (212) 557-2077

| | |
|---|---|
| Total assets managed | $577,000,000 |
| Tax-exempt assets managed | $577,000,000 |
| Dedicated funds managed | $577,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 11 |
| Types of accounts managed | CF |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

Ward & Wissner Capital Management is a fixed-income manager that structures bond portfolios to achieve targeted plan objectives, either nominal or real rates of return and/or minimum return in the appreciation potential.

Options and fixed-income futures are used.

The asset mix Jan. 1 for the dedicated/immunized bond portfolio was 60% bonds, 7% cash, 23% mortgage-backed securities and 10% options and futures.

Clients include Stone & Webster, Gates, Centel and the Noyes Foundation.

Leonard H. Wissner, president, is the chief investment officer and the client contact.

### Wardley Investment Services International Ltd.

5 E. 59th St., Suite 7000, New York, N.Y. 10022; (212) 415-0660

| | |
|---|---|
| Total assets managed | $1,016,000,000 |
| Tax-exempt assets managed | $59,000,000 |
| International assets managed | $59,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 4 |
| Types of accounts managed | CG |
| No. of portfolio managers | 6 |
| Size of research staff | 10 |

Wardley Investment Services International Ltd. is an international manager.

Its equity approach uses Graham & Dodd analysis and market timing. It is a top-down fundamentalist. Weightings are based on projected accelerating economic growth in the country; selection on relative accelerating earnings growth potential. Its fixed-income approach uses interest rate anticipation.

The parent company is Wardley Investment Services Ltd.

Ian R. Henderson, director, is chief international investment officer; Deborah G. George, executive vice president, is client contact.

### David E. Ware & Associates

2300 N. Barrington Road, Suite 340, Hoffman Estates, Ill. 60195; (312) 490-9060

| | |
|---|---|
| Total assets managed | $22,000,000 |
| Tax-exempt assets managed | $10,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 21 |
| Types of accounts managed | CE |
| No. of portfolio managers | 1 |
| Size of research staff | 1 |

David E. Ware & Associates Inc. is a balanced manager.

Using strategic asset allocation, its approach is to establish a specific asset mix in each account in response to the changing patterns of opportunity available in the capital markets. The asset mix is determined by a statistically based capital asset weighting model. In equities, its approach is value oriented.

Clients include Lawndale Steel, Plymouth Tube Co., H-O-H Chemicals and Suburban Moving & Storage.

David E. Ware, president, is chief investment officer and client contact.

### Washington Square Capital

512 Nicollet Mall, Minneapolis, Minn. 55402; (612) 342-3737

| | |
|---|---|
| Total assets managed | $6,100,000,000 |
| Tax-exempt assets managed | $3,699,000,000 |
| Real estate assets managed | $1,024,000,000 |
| Minimum separate account | $10,000,000 |
| Types of accounts managed | C |
| No. of portfolio managers | 9 |
| Size of research staff | 25 |

Washington Square Capital Inc. is a GIC manager. Balanced and fixed-income management is offered through its subsidiary, Washington Square Capital Advisors. Equity management is offered through a partnership with Hahn, Holland and Groesman.

Its fixed-income approach is active and structured. Portfolios are structured to meet the client's unique needs. Active management occurs across the credit spectrum in all appropriate vehicles.

The asset mix Jan. 1 was 26% bonds, 3% cash, 45% mortgages and 26% private placements; $2.276 billion was managed in GICs and general account pension-related products on behalf of its parent company, Northwestern National Life Insurance Co.

All research is generated internally.

Clients include Honeywell, EG&G, Rolscreen and Hughes Aircraft.

Russell Swanson, vice president, is chief investment officer. Stephen Dillenberg, vice president-marketing at (612) 342-3737, is client contact for fixed-income and balanced management; Elizabeth R. Niemeier, vice president-marketing at (612) 342-3408, is client contact for GIC management.

### Webster Capital Management

20 Exchange Place, New York, N.Y. 10005; (212) 510-5352

| | |
|---|---|
| Total assets managed | $1,203,000,000 |
| Tax-exempt assets managed | $1,133,000,000 |
| 401(k)/457 assets managed | $15,000,000 |
| 401(k)/457 clients | 1 |
| Index funds managed | $45,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 18 |
| Types of accounts managed | CEJG |
| No. of portfolio managers | 5 |

Webster Capital Management is an equity, balanced and options overwriting manager.

Its equity approach is to minimize losses in declining markets and maximize returns in rising markets. It is a tactical asset allocator and uses quantitative or passive approaches.

Its fixed-income approach is passive, using financial futures and options.

The asset mix Jan. 1 was 30% stocks, 10% bonds, 10% cash and 50% options/futures.

Portfolio insurance is provided to two clients covering $80 million.

It follows 700 stocks closely; all research is generated internally.

Webster Capital is a division of Webster Management Corp., a subsidiary of Kidder, Peabody & Co., Inc.

Clients include GTE, Pennsylvania Public School Employes, Robert College and Montgomery County.

James D. Taliaferro, president, is chief investment officer; William O. Melvin Jr., director-investments, is client contact.

### WEDGE Capital Management

1650 Charlotte Plaza, Charlotte, N.C. 28244; (704) 334-6475

| | |
|---|---|
| Total assets managed | $377,000,000 |
| Tax-exempt assets managed | $267,000,000 |
| Minimum separate account | $3,000,000 |
| Tax-exempt clients | 54 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 3 |
| Size of research staff | 1 |

WEDGE Capital Management is an equity, fixed-income and balanced manager.

Its equity approach uses quantitative disciplines to evaluate a broad universe. Desired stocks will have improving earnings, good dividends and low p/e ratios.

Its fixed-income approach uses quantitative disciplines to anticipate interest rate changes.

Clients include L.L. Bean, Genesco, Food Lion and Southwire.

Richard X. Hodde, general partner, is chief investment officer; R. Michael James, general partner, is client contact.

### Weiser Investment Management Ltd.

135 S. LaSalle St. Suite 630, Chicago, Ill. 60603; (312) 372-1535

| | |
|---|---|
| Total assets managed | $27,000,000 |
| Tax-exempt assets managed | $7,000,000 |
| Minimum separate account | $300,000 |
| Tax-exempt clients | 12 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |

Weiser Investment Management Ltd. is an equity and balanced manager.

The firm uses a flexible Graham & Dodd approach with emphasis on earnings and sales growth, financial condition and book value. Fixed-income investments are almost solely in convertibles. Options are used rarely, and only on buy/write programs.

Clients include Odetics and Taylor Spring Manufacturing.

Morris Weiser, president, is chief investment officer; Mr. Weiser and Michael Herst, vice president, are client contacts.

### Weiss, Peck & Greer

1 New York Plaza, New York, N.Y. 10004; (212) 908-9500

| | |
|---|---|
| Total assets managed | $3,724,000,000 |
| Tax-exempt assets managed | $2,870,000,000 |
| Real estate assets managed | $300,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 100 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 12 |
| Size of research staff | 7 |

Weiss, Peck & Greer is an equity, fixed-income and balanced manager.

Its equity approach is flexible, characterized by a combination of top-down and bottom-up processes, overweighting particularly attractive sectors. In stock selection, the firm is value-driven, seeking companies with consistent earnings growth or with prospects of fundamental change in structure or regulation in its industry.

Its fixed-income approach stresses high-quality portfolios to earn significant excess returns over bond indexes. Management is systematic, based on holding a constant level of portfolio risk and producing the excess returns consistently. The methodology is an alternative to indexation and market timing.

Options and financial futures are used.

The asset mix Jan. 1 was 53% stocks, 28% bonds, 9% cash and 10% mortgage-backed securities.

It follows 200 stocks closely and 500 generally; 95% of research is generated internally.

Clients include GM, GTE and Allied.

Stephen H. Weiss is chief investment officer; Vincent E. Teti is client contact.

### Wellington Management Co./Thorndike, Doran, Paine & Lewis

28 State St., Boston, Mass. 02109; (617) 227-9500

| | |
|---|---|
| Total assets managed | $28,435,000,000 |
| Tax-exempt assets managed | $8,523,000,000 |
| Real estate assets managed | $262,000,000 |
| International assets managed | $306,000,000 |
| Minimum account size | $10,000,000 |
| Tax-exempt clients | 191 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 28 |
| Size of research staff | 45 |

Wellington Management Co./Thorndike, Doran, Paine & Lewis is an equity, fixed-income, balanced, real estate and international manager.

Its equity approach offers a broad range of styles: established growth; emerging company technology and non-technology; equity income; convertible securities; special situations; international; and Pacific Basin. Graham & Dodd analysis is used.

Using interest rate anticipation and sector analysis, its fixed-income strategies include intermediate; government/corporate; long; high yield; mortgage-related; and international.

Options and financial futures are used.

For real estate, it invests in residential, multifactor properties that are diversified geographically.

The asset mix Jan. 1 was 70% stocks, 17% bonds, 7% cash, 1% equity real estate and 5% mortgage-backed securities; $301 million was in foreign stocks and $5 million in foreign bonds.

Robert W. Doran, president, is chief investment officer; Dena G. Willmore, senior vice president, is client contact.

### Wells Fargo Investment Advisors

50 California St., 11th Floor, San Francisco, Calif. 94123; (415) 434-6000

| | |
|---|---|
| Total assets managed | $49,981,000,000 |
| Tax-exempt assets managed | $49,981,000,000 |
| 401(k)/457 assets managed | $613,000,000 |
| Real estate assets managed | $500,000,000 |
| International assets managed | $802,000,000 |
| Index funds managed | $42,080,000,000 |
| Dedicated funds managed | $496,000,000 |
| Minimum separate account | $100,000,000 |
| Tax-exempt clients | 224 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 13 |
| Size of research staff | 6 |

Wells Fargo Investment Advisors is an equity, fixed-income, balanced and international manager.

The firm offers index funds and index-based management. Each product shares the common characteristics of highly controlled investment outcomes at the lowest possible cost to the sponsor. Options and financial futures are used.

Its passive fixed-income approach offers index funds tracking the Shearson Lehman Hutton Government/Corporate bond index and the Salomon Brothers BIG index.

The asset mix Jan. 1 was 70% stocks, 21% bonds, 3% cash, 1% mortgage-backed securities and 5% portfolio insurance; $802 million was in foreign stocks, $31.11 billion in equity index funds and $10.97 billion in bond index funds.

Portfolio insurance is provided to five clients covering $2.78 million.

The parent is Wells Fargo & Co.

Patricia C. Dunn, president, and Jeffrey L. Skelton, vice chairman, are co-chief investment officers; Michael J. Henman, senior vice president, is client contact.

### Wells Fargo Realty Advisors

595 Market St., 15th Floor, San Francisco, Calif. 94105-2824; (415) 477-5800

| | |
|---|---|
| Total assets managed | $3,076,000,000 |
| Tax-exempt assets managed | $735,000,000 |
| 401(k)/457 assets managed | $40,000,000 |
| 401(k)/457 clients | 6 |
| Real estate assets managed | $735,000,000 |
| Minimum separate account | $100,000,000 |
| Tax-exempt clients | 150 |
| Types of accounts managed | CG |
| No. of portfolio managers | 2 |

Wells Fargo Realty Advisors, a real estate manager, seeks investment opportunities where value can be created through development, renovation, expansion or active asset management.

The asset mix Jan. 1 was 52.9% equity real estate and 47.1% mortgages.

The parent is Wells Fargo & Co.

Clients include Avon Products, GM and Ohio Public Employees.

Doug Hayek, director of acquisitions, is chief investment officer; J. Michael Johnson, director of marketing, is client contact.

### Wentworth Hauser & Violich

333 Sacramento St., San Francisco, Calif. 94111; (415) 981-6911

| | |
|---|---|
| Total assets managed | $2,240,000,000 |
| Tax-exempt assets managed | $1,969,000,000 |
| Dedicated funds managed | $15,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 92 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 6 |
| Size of research staff | 2 |

Wentworth Hauser & Violich is an equity, fixed-income and balanced manager.

Equity portfolio characteristics are p/e less than the S&P, 10-year dividend growth rates double the S&P, and implied returns (yield plus plow back) 30% greater than the S&P.

Its fixed-income approach structures portfolios to take advantage of cyclical behavior of interest rates. Average maturity is less than five years.

The asset mix Jan. 1 was 23% stocks, 70% bonds and 7% cash.

It follows 120 stocks closely and 480, generally; 50% of research is generated internally.

Clients include New Mexico Public Employees, Halliburton, Southern California Edison and Hawaii Employees.

W.K. Hauser, president, is chief investment officer; Bradford Hall, vice president, is client contact.

### Wertheim Asset Management Services Inc.

230 Park Ave., New York, N.Y. 10169-0105; (212) 370-6140

| | |
|---|---|
| Total assets managed | $956,000,000 |
| Tax-exempt assets managed | $956,000,000 |
| Real estate assets managed | $119,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 25 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 5 |

Wertheim Asset Management Services Inc. is an equity, fixed-income and balanced manager.

For equities, the firm is a bottom-up, stock-picking investor emphasizing growth companies before market exploitation. The investment focus, regardless of secular trends or economic sectors, is on companies whose earnings and ROE are forecast to improve over two to three years.

Its fixed-income approach emphasizes total return through active management. Dependent on market cycle, valuation analysis and interest rate forecast, debt portfolios may either seek capital gains or seek high levels of income and price stability.

The asset mix Jan. 1 was 22% stocks, 46% bonds, 21% cash and 11% mortgage-backed securities.

The parent company is Wertheim Schroder & Co. Inc.

Stephen Boyd is chief investment officer; Steven Golann, senior vice president, is client contact.

### Western Asset Management

117 E. Colorado Blvd., Pasadena, Calif. 91105; (818) 584-4300

| | |
|---|---|
| Total assets managed | $4,335,000,000 |
| Tax-exempt assets managed | $3,896,000,000 |
| Real estate assets managed | $1,500,000,000 |
| Index funds managed | $78,000,000 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 29 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 7 |
| Size of research staff | 4 |

Western Asset Management Co., a fixed-income manager, combines sector analysis with conservative investment techniques and progressive quantitative analysis to add value. Options and fixed-income futures are used.

The asset mix Jan. 1 was 58% bonds, 2% cash and 40% mortgage-backed securities; $78 million was in bond index funds.

The parent is Legg Mason Inc.

Clients include AT&T, Minnesota State Board, ILGWU and NYNEX.

W. Curtis Livingston is chief executive officer; Randolph L. Kohn, director of marketing, is client contact.

### Western Reserve Capital Management Inc.

2001 Ross Ave., 44th Floor, Dallas, Texas 75265-5003; (214) 979-7770

| | |
|---|---|
| Total assets managed | $351,000,000 |
| Tax-exempt assets managed | $351,000,000 |
| International assets managed | $74,000,000 |
| Tax-exempt clients | 1 |
| Types of accounts managed | C |
| No. of portfolio managers | 4 |

Western Reserve Capital Management Inc., an equity and international manager, combines top-down and bottom-up approaches, focusing on emerging growth and growth companies.

It follows 60 stocks closely and 200 generally; 50% of research is generated internally.

The parent company is The LTV Corp., which is the firm's tax-exempt client.

Thomas Tull is chief investment officer.

### Westwood Management

885 Third Ave., New York, N.Y. 10022-4802; (212) 688-2323

| | |
|---|---|
| Total assets managed | $620,000,000 |
| Tax-exempt assets managed | $575,000,000 |
| 401(k)/457 assets managed | $10,000,000 |
| 401(k)/457 clients | 1 |
| Minimum separate account | $25,000,000 |
| Tax-exempt clients | 23 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 3 |
| Size of research staff | 3 |

Westwood Management Corp., an equity manager, is a top-down, active asset allocator using cash, bonds and options and stock index futures in addition to stocks.

The asset mix Jan. 1 was 65% stocks, 25% bonds and 10% cash.

The firm follows 30 stocks closely and between 40 and 75 generally; 40% of research is generated internally.

Clients include Georgia Pacific, Texas Instruments, Champion International and Xerox.

Susan M. Byrne, president, is chief investment officer; David W. Jennings, executive vice president, is client contact.

### Wilkens & Nanovic Associates

35 Mason St., Greenwich, Conn. 06830; (203) 622-1040

| | |
|---|---|
| Total assets managed | $470,000,000 |
| Tax-exempt assets managed | $470,000,000 |
| Minimum separate account | $15,000,000 |
| Tax-exempt clients | 4 |
| Types of accounts managed | C |
| No. of portfolio managers | 2 |

Wilkens & Nanovic Associates is a risk-averse core equity manager focusing on identifying fundamental changes within companies whose stocks at purchase exhibit limited downside risk. Portfolios are diversified; cash reserves may reach 50%.

The firm follows 90 stocks closely and 400, generally; 10% of research is generated internally.

Clients include GenCorp, RJR Nabisco, Sea-Land and Inco.

Frank Wilkens is chief investment officer.

### Wilmington Capital Management Inc.

1 Rodney Square, Suite 807, Wilmington, Del. 19801; (302) 656-8241

| | |
|---|---|
| Total assets managed | $992,000,000 |
| Tax-exempt assets managed | $914,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 17 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 3 |
| Size of research staff | 3 |

Wilmington Capital Management Inc. is an equity and balanced manager.

Its equity approach combines Graham & Dodd analysis and low p/e stocks. Its seeks to determine value through fundamental analysis; disparities between value and price create investment opportunities. Fixed income is used in balanced accounts for increased cash flow, reduced market volatility and to protect against business risk.

The asset mix Jan. 1 was 85.2% stocks, 2.9% bonds and 11.9% cash.

It follows 80 stocks closely and 300 generally; 75% of research is generated internally.

Clients include Delmarva Power & Light, Pennsylvania Power & Light, California Teachers and Teamsters.

Daniel F. Mahoney Jr., president, is chief investment officer; James W. MacAllen, vice president, is client contact.

### Wilmington Trust Co.

Rodney Square North, Wilmington, Del. 19890; (302) 651-8518

| | |
|---|---|
| Total assets managed | $18,038,000,000 |
| Tax-exempt assets managed: | |
| Total | $1,006,000,000 |
| Commingled | $62,000,000 |
| Separate | $944,000,000 |
| 401(k)/457 assets managed | $6,000,000 |
| 401(k)/457 clients | 9 |
| International assets managed | $2,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients: | |
| Commingled | 6 |
| Separate | 115 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 8 |
| Size of research staff | 6 |

Wilmington Trust Co. is an equity, fixed-income, balanced, international and GIC manager.

Its equity approach is disciplined, systematic, consistent and value oriented, using low p/e stocks and Graham & Dodd analysis. It offers three distinct approaches: quantitative equities, core value and optioned equity.

Its fixed-income approach uses a mathematical investment process that reacts to and participates in market price trends.

Options and fixed-income futures are used.

The asset mix Jan. 1 was 34% stocks, 42% bonds and 24% cash; $2 million was in foreign stocks.

It follows 125 stocks closely and 300, generally; 75% of research is generated internally.

Clients include Hagley Museum & Library and Iowa State University.

Nathan Hayward III, senior vice president, is chief investment officer; Peter J. Succoso, vice president, is client contact.

### Wilshire Asset Management

1299 Ocean Ave., Santa Monica, Calif. 90401; (213) 451-3051

| | |
|---|---|
| Total assets managed | $2,500,000,000 |
| Tax-exempt assets managed | $2,500,000,000 |
| Index funds managed | $2,500,000,000 |
| Tax-exempt clients | 5 |
| Types of accounts managed | CG |
| No. of portfolio managers | 3 |
| Size of research staff | 2 |

Wilshire Asset Management, an equity manager, provides a variety of index and custom approaches including highly disciplined style-oriented portfolios. Costs are controlled through low turnover and highly efficient trading practices. Stock index futures are used in rebalancing portfolios.

All assets Jan. 1 were in equity index funds.

The firm follows 6,000 stocks generally; all research is generated internally.

The parent company is Wilshire Associates.

Clients include Minnesota, North Dakota Teachers and Minnesota Mutual.

Thomas D. Stevens is chief investment officer and client contact.

### Wilson Foster & Co. Inc.

4987 Olivas Park Drive, No. 100, Ventura, Calif. 93001; (805) 644-8207

| | |
|---|---|
| Total assets managed | $72,000,000 |
| Tax-exempt assets managed | $71,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 15 |
| Types of accounts managed | CF |
| No. of portfolio managers | 2 |

Wilson Foster & Co. Inc. is an equity and balanced manager.

Its equity approach combines growth and low p/e stocks and market timing. It screens for new trends and growth potentials and the desire of investor ownership, including a major emphasis on fundamental analysis. Asset allocation depends upon perceived risks.

It follows 60 stocks closely and 700, generally; 50% of research is generated internally.

Harvey F. Wilson, president, is chief investment officer; Fynn F. Wilson, portfolio manager, is client contact.

### Wilson, Kemp & Associates

400 Renaissance Center, Detroit, Mich. 48243; (313) 259-6210

| | |
|---|---|
| Total assets managed | $340,000,000 |
| Tax-exempt assets managed | $210,000,000 |
| Minimum separate account | $200,000 |
| Tax-exempt clients | 80 |
| Types of accounts managed | CEFG |
| No. of portfolio managers | 2 |

Wilson, Kemp & Associates Inc. is an equity, fixed-income and balanced manager.

Its equity approach is fundamental, combining growth, emerging growth and low p/e stocks with Graham &

Dodd analysis.

Its fixed-income approach uses interest rate anticipation without a short-term trading orientation.

It follows 75 stocks closely and 300, generally; 5% of research is generated internally.

Robert D. Kemp Jr. and Thomas A. Wilson, principals, are chief investment officers and client contacts.

### Winchester Capital Management Co.

1 International Place, Boston, Mass. 02110; (617) 482-3001

| | |
|---|---|
| Total assets managed | $160,000,000 |
| Tax-exempt assets managed | $100,000,000 |
| Minimum separate account | $500,000 |
| Tax-exempt clients | 48 |
| Types of accounts managed | CFGJ |
| No. of portfolio managers | 4 |

Winchester Capital Management Co. is an equity, fixed-income, balanced and GIC manager.

Its equity approach uses sector rotation, and is top-down and bottom-up. Valuation mechanisms include relative and absolute p/e.

Its fixed-income approach uses interest rate anticipation based on macroeconomic analysis.

It follows 100 stocks closely and 50, generally; 50% of research is generated internally.

John Livens, principal, is chief investment officer; Paul J. Marcus, principal, is client contact.

### Winrich Capital Management

23702 Birtcher Drive, Lake Forest, Calif. 92630; (714) 380-0200

| | |
|---|---|
| Total assets managed | $180,000,000 |
| Tax-exempt assets managed | $119,000,000 |
| International assets managed | $6,000,000 |
| Minimum separate account | $1,000,000 |
| Tax-exempt clients | 33 |
| Types of accounts managed | CF |
| No. of portfolio managers | 4 |
| Size of research staff | 2 |

Winrich Capital Management Inc. is an equity, fixed-income and balanced manager.

Its equity approach is value-oriented, using systematic, computer-aided application of objective criteria, plus daily monitoring, revaluation and application of buy/sell disciplines. Criteria are low p/e, strong balance sheet and unrecognized assets.

Fixed-income investments are used as a stabilizing influence/income generator. High-quality government and corporate securities are used, with laddered maturities. The average maturity is adjusted based on interest rate expectations using yield curve analysis.

Darrell J. Winrich, chairman and president, is chief investment officer; Kurt R. Winrich, vice president, is client contact.

### Wolf, Webb, Burk & Campbell Inc.

260 S. Broad St., Suite 901, Philadelphia, Pa. 19102; (215) 735-5910

| | |
|---|---|
| Total assets managed | $850,500,000 |
| Tax-exempt assets managed | $800,000,000 |
| Real estate assets managed | $50,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 38 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 5 |

Wolf, Webb, Burk & Campbell Inc. is an equity, fixed-income and balanced manager.

Equity investments are made based on the firm's value-oriented, sector rotational, market-timing approach. Its fixed-income approach is keyed to interest rate anticipation, market timing and, to a lesser degree, sector swaps.

The asset mix Jan. 1 was 38% stocks, 44% bonds, 12% cash and 6% mortgage-backed securities.

It follows 150 stocks closely and 1,000, generally; 75% of research is generated internally.

Clients include BIC, Wichita and Skidmore College.

H. Jerry Wolf, president, is chief investment officer; Bill Campbell, vice president and principal, is client contact.

### Woodbyne Corp.

P.O. Box 182, Columbus, Ohio 43085; (614) 436-6510

| | |
|---|---|
| Total assets managed | $3,000,000 |
| Tax-exempt assets managed | $3,000,000 |
| Tax-exempt clients | 1 |
| Types of accounts managed | E |
| No. of portfolio managers | 1 |

Woodbyne Corp. is an equity, fixed-income and balanced manager.

Its approach is to balance high-yield domestic stocks, quality corporate bonds and Treasury issues to achieve maximum total return.

The tax-exempt client is Adrian College.

Walter B. Wiley, president, is chief investment officer and client contact.

### Woodmont Realty Advisors

1050 Ralston Ave., Belmont, Calif. 94002; (415) 592-3960

| | |
|---|---|
| Total assets managed | $550,000,000 |
| Tax-exempt assets managed | $200,000,000 |
| Real estate assets managed | $200,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 4 |
| Types of accounts managed | FG |

Woodmont Realty Advisors Inc. is a direct separate account equity real estate adviser that provides acquisition, disposition and asset management concentrating on West Coast fully leased office, industrial, R&D, warehouse and apartment properties. Property management is done in-house.

The parent is Woodmont Cos.

Clients include Marin County Employees' and Koret Foundation.

Allen Cymrot, president and chief executive officer, is chief investment officer; Howard Friedman, executive vice president, is client contact.

### Wood, Struthers & Winthrop Management Corp.

140 Broadway, 42nd Floor, New York, N.Y. 10005; (800) 221-2832 or (212) 504-4034

| | |
|---|---|
| Total assets managed | $1,162,000,000 |
| Tax-exempt assets managed | $445,000,000 |
| Real estate assets managed | $24,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 95 |
| Types of accounts managed | CEFJ |
| No. of portfolio managers | 6 |
| Size of research staff | 2 |

Wood, Struthers & Winthrop Management Corp. is an equity, fixed-income and balanced manager.

Its equity approach is based on fundamental research screened within the context of quantitative valuation techniques. Holdings are concentrated by sectors, emphasizing industry leaders with an identifiable earnings growth pattern. Options are used.

Its fixed-income approach focuses on maturity risk to ensure preservation of capital and a real rate of return over an interest rate cycle. Fundamental research is used.

The parent company is Donaldson, Lufkin & Jenrette Inc., a subsidiary of Equitable Life Assurance Society of the United States.

James A. Engle is chief investment officer; Charlote B. Beyer, senior vice president, is client contact.

### WorldInvest Ltd.

55/56 Russell Square, London WC1B 4MP U.K.; 01-637-3322

| | |
|---|---|
| Total assets managed | $2,421,000,000 |
| Tax-exempt assets managed | $1,535,000,000 |
| International assets managed | $1,535,000,000 |
| Minimum separate account | $10,000,000 |
| Tax-exempt clients | 28 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 10 |
| Size of research staff | 4 |

WorldInvest Ltd., formerly BA Investment Management International Ltd., an international and global manager, takes a top-down equity approach using emerging growth and low p/e stocks. Separate market, sector and currency decisions are based on fundamental analysis. Emphasis is on companies with improving margins, product innovations and expanding markets.

Its fixed-income approach is influenced by interest rate anticipation. It takes a top-down approach with market, duration and currency decisions based on fundamental analysis. Managers do selective swaps between different sectors and borrowers.

The asset mix Jan. 1 was 12% stocks and 88% bonds.

It follows 100 stocks closely and 250, generally; 10% of research is generated internally.

The parent company is WorldInvest (Holdings) Ltd.

Clients include GM, Common Fund, GTE and World Bank.

Keith Brown, chairman, is chief investment officer; Francois Dennery, director, is client contact at (212) 755-0900.

### WRC Capital Management

1310 Lady St., Ninth Floor, Columbia, S.C. 29201; (803) 254-5421

| | |
|---|---|
| Total assets managed | $27,000,000 |
| Tax-exempt assets managed | $14,000,000 |
| Minimum separate account | $250,000 |
| Tax-exempt clients | 30 |
| Types of accounts managed | C |
| No. of portfolio managers | 4 |
| Size of research staff | 2 |

WRC Capital Management is an equity, fixed-income and balanced manager.

Equity investments are made in undervalued low p/e stocks with high yields and solid fundamentals. The firm maintains its own econometric asset allocation model. It uses Graham & Dodd methods.

Its fixed-income approach features interest rate anticipation based on its econometric model. Only U.S. government issues are used.

The firm follows 50 stocks closely and 75, generally; 50% of research is generated internally.

Ephraim Ulmer is chief investment officer and client contact.

### Wright Investors' Service

10 Middle St., Bridgeport, Conn. 06604; (203) 333-6666

| | |
|---|---|
| Total assets managed | $3,365,000,000 |
| Tax-exempt assets managed | $2,989,000,000 |
| Dedicated funds managed | $497,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 110 |
| Types of accounts managed | CEFJG |
| No. of portfolio managers | 7 |
| Size of research staff | 37 |

Wright Investors' Service is an equity, fixed-income and balanced manager.

Equity investments follow semi-passive, growth and small-cap growth stock strategies. It offers three products: quality core — quality growth broadly diversified; blue chip — value-established growth companies; and junior blue chip — smaller, well-established growth companies.

Its fixed-income approach is influenced by interest rate anticipation; active management and dedicated programs are offered.

The asset mix Jan. 1 was 65% stocks, 33% bonds and 2% cash.

It follows 360 stocks closely and 4,000 generally; all research is generated internally.

The parent is Winthrop Corp.

Judith R. Corchard, executive vice president and senior investment officer, is chief investment officer; Albert L. Meric Jr., executive vice president, is client contact.

## Y

### Yamaichi Capital Management Inc.

2 World Trade Center, Suite 9660, New York, N.Y. 10048; (212) 912-6484

| | |
|---|---|
| Total assets managed | $95,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $10,000,000 |
| No. of portfolio managers | 3 |

Yamaichi Capital Management Inc. is an equity, fixed-income, balanced and global manager.

Its equity approach focuses on asset allocation, industry sectors and a favorable reward/risk evaluation that maximizes return and minimizes risk.

Its fixed-income approach analyzes economic and monetary trends to identify optimal maturity selection.

The parent company is Yamaichi International Capital Management.

Henry A. Frantzen is chief investment officer.

### Yasuda Bank & Trust Co.

1 World Trade Center, Suite 8833, New York, N.Y. 10048; (212) 912-1684

| | |
|---|---|
| Total assets managed | $0 |
| No. of portfolio managers | 20 |
| Size of research staff | 20 |

Yasuda Bank & Trust Co. is an equity, fixed income, balanced and international manager.

For equity investments, about 70% is indexed to the market, while 30% is actively invested in low p/e stocks. It has a long-term (three years-plus) view of the market. Its fixed-income approach indexes about 70% of assets with 30% invested based on interest rate projections. A medium- to long-term duration weighting is used.

Stock index and fixed-income futures are used.

The parent company is Yasuda Trust and Bank Ltd., Toyko.

Shoji Yamada, general manager-pension fund management department, is chief investment officer; W. Franklin Clemmons II, assistant treasurer, is client contact.

### Yeager, Wood & Marshall

630 Fifth Ave., New York, N.Y. 10111; (212) 765-5350

| | |
|---|---|
| Total assets managed | $840,000,000 |
| Tax-exempt assets managed | $640,000,000 |
| Minimum separate account | $15,000,000 |
| Tax-exempt clients | 16 |
| Types of accounts managed | CEF |
| No. of portfolio managers | 3 |

Yeager, Wood & Marshall Inc., an equity manager, invests solely in growth company stocks. Portfolio companies dominate their relevant markets and enjoy recurring revenue, thus ensuring sustainability of superior growth rates.

The asset mix Jan. 1 was 89% stocks and 11% cash and equivalents.

The firm follows 40 to 50 stocks closely and 50 to 75, generally; 85% of the research is generated internally.

Clients include American Red Cross, Cincinnati Bell, Corning Glass Works and International Paper.

B. Robert Wood, executive vice president, is chief investment officer; Virginia P. Corsi, vice president, is client contact.

### Yield Management Group

20 Toronto St. Suite 1140, Toronto, Ontario M5C 2B8; (416) 364-3711

| | |
|---|---|
| Total assets managed | $900,000,000 |
| Tax-exempt assets managed: | |
| Total | $250,000,000 |
| For subsidiaries of U.S. firms | $70,000,000 |
| Indexed assets managed | $50,000,000 |
| Dedicated assets | $66,000,000 |
| Minimum separate account | $5,000,000 |
| Tax-exempt clients | 40 |
| U.S. subsidiaries | 3 |
| Types of accounts managed | CU |
| No. of portfolio managers | 3 |
| Size of research staff | 3 |

Yield Management Group, a Canadian firm, is an equity, fixed-income and balanced manager.

Its equity approach screens stocks for specific historic characteristics — low price-to-book, high return on equity. Graham & Dodd analysis is used; an optimization model is also used.

Its passive fixed-income approach ranges from immunization to return optimization under various interest rate scenarios. Sector analysis is used.

Eric Innes is chief investment officer and client contact.

## Z

### Zavanelli Portfolio Research

729 S. Prospect, Park Ridge, Ill. 60068; (312) 823-6718

| | |
|---|---|
| Total assets managed | $2,000,000 |
| Tax-exempt assets managed | $1,000,000 |
| Minimum separate account | $100,000 |
| Tax-exempt clients | 2 |
| Types of accounts managed | CJ |
| No. of portfolio managers | 1 |
| Size of research staff | 2 |

Zavanelli Portfolio Research, an equity manager, isolates market inefficiencies by using computerized research techniques in conjunction with theories of investor behavior. It has developed a system claimed to be a significant expansion of modern portfolio theory and efficient market theory. Options are used.

The firm follows 40 stocks closely and 3,000 generally; all research is generated internally.

Portfolio insurance is offered to two clients covering $1 million.

Clients include Frankel Furniture.

Max Zavanelli is chief investment officer; Cecil Suter is client contact.

### Zevenbergen Capital Inc.

3809 N.E. 96th St., Seattle, Wash. 98115; (206) 525-3386

| | |
|---|---|
| Total assets managed | $5,000,000 |
| Tax-exempt assets managed | $0 |
| Minimum separate account | $250,000 |
| No. of portfolio managers | 1 |

Zevenbergen Capital Inc., an equity manager, uses a bottom-up, value-oriented approach based on fundamentals. Its fixed-income approach is passive. Options are used.

The firm follows 25 stocks closely and 50 generally; 15% of research is generated internally.

Nancy A. Zevenbergen, principal, is chief investment officer; Kathleen H. Sesnon, vice president, is client contact.

## Consultant exec moves to new firm

DALLAS — Brian C. Ternoey, principal and national director of the William M. Mercer-Meidinger-Hansen Inc. insurance consulting practice, will leave at the end of May to head the insurance and annuity consulting division at A. Foster Higgins & Co., New York.

Mr. Ternoey will replace Murray Becker who left the parent company of Johnson & Higgins Jan. 29, along with other J&H executives, to establish a guaranteed investment contract management and consulting firm: Becker, Rooney Inc., Teaneck, N.J.

Mr. Ternoey becomes the third national director of insurance consulting to leave Mercer-Meidinger-Hansen since 1985.

At that time, Vernon Hodge, who was also national director of asset planning for what was then Mercer-Meidinger, left to form PRIMCO Capital Management Inc., a GIC management firm in Louisville, Ky.

Mr. Hodge was succeeded as national director of the insurance consulting group by Peter Bowles, who left in 1987 to set up Fiduciary Capital Management Inc. a GIC management firm in Woodbury, Conn.

Carol Proffer, principal and head of the Mercer-Meidinger-Hansen asset planning office in Dallas, said she expects to replace Mr. Ternoey.

Ms. Proffer also plans to expand the asset planning staff in Dallas from its current level of 13 people, she said.

Mr. Ternoey is the second senior-level person to leave Mercer-Meidinger-Hansen's Dallas office following the merger of William M. Mercer-Meidinger Inc. and A.S. Hansen Inc. in February 1987.

Guy Cooper, a principal and consultant with Hansen, resigned earlier this year in order to remain in Dallas rather than accept a position in the Mercer-Meidinger-Hansen office in Deerfield, Ill., Ms. Proffer said. ■

PROFILES

# Growth slows

*Continued from page 1*

1986 and Jan. 1, 1987, the largest 25 bond indexers reported a 102% increase.

Patricia Dunn, president of Wells Fargo Investment Advisors, San Francisco, the leading bond index fund manager, attributed the continued growth to "increasing realization that the active bond manager doesn't add value."

The 25 largest real estate managers saw an increase in tax-exempt assets of almost 45% from last year, to $63.8 billion from $44.1 billion in 1986. Overall, real estate assets managed increased 29.3%, to $96.1 billion from $74.3 billion. Of that, equity real estate increased 43.5%, to $78.4 billion from $54.6 billion, and mortgages increased more than 20%, to $17.7 billion from $14.7 billion.

Paul Saylor, principal of Institutional Property Consultants Inc., Atlanta, said the market drop is one reason pension funds are flocking to real estate. Others are "a result of the natural growth of pension funds; the acceptability of real estate (as an investment for pension funds); its lack of volatility; and competitive yields over time."

Among the Top 100 managers of tax-exempt assets, four are making their first appearances in *P&I Age's* directory. One — GE Investment Management Inc. is the largest independent investment adviser profiled. GE has $19.9 billion under management, all from GE's employee benefit assets, and now is taking outside clients.

One newcomer represents a merger of two old-timers: Northern Investment Management Co., created from the union of Northern Trust Co./Strategic Investment Services and The Griffin Group, with $5.6 billion under management. The other two are Sears Investment Management Co., with $4.7 billion under management, and VALIC, a Houston-based insurance company owned American General Corp., with $7.1 billion.

Ten other new names appeared on the list for the first time, although like Northern Investment, not all are truly new. The firms and their tax-exempt assets under management are: The Chemical Investment Group, which runs $8.4 billion through six subsidiaries, including Texas Commerce Investment Management Co. and Favia, Hill & Associates; Mitchell Hutchins Institutional Investors Inc., the renamed Manufacturers Hanover Investment Corp., with $18.4 billion; and JMB Institutional Realty Corp., whose assets jumped more than $4 billion to $5.8 billion with the acquisition last year of Cadillac Fairview Corp. Ltd.

Also, Great-West Life Assurance Co., which in prior years was ranked as a Canadian firm but has been reclassified as a domestic company, with $5.5 billion; Discount Corp. of New York Advisers, $5.3 billion; Merrill Lynch Asset Management Co., $4.8 billion; Manufacturers National Bank of Detroit, $4 billion; Dimensional Fund Advisors, $4 billion; Nationwide Insurance Group, $3.9 billion; and Western Asset Management, $3.9 billion.

VALIC and Great-West also entered the list of the 25 largest insurers, ranking 15th and 18th respectively.

Managers dropped from the Top 100 managers of tax-exempt assets include Batterymarch Financial Management, whose assets decreased $1 billion to $6.7 billion, and Kemper Financial Services Inc., also down $1 billion to $2.6 billion.

The Common Fund, Lincoln National Pension Insurance Co. and Frank Russell Trust Co. were removed from the general ranking because they are managers of managers.

Other highlights of *P&I Age's* special profiles issue include:

- The 25 largest managers of 401(k) assets reported a decrease in assets this year of 12.4%, partly because of the market crash and also because many managers were unable to break out 401(k) and 457 plan asset data by deadline.
- The 25 largest equity index managers gained 10.7% in assets this year, to $102.2 billion from $92.3 billion.
- Thirty-nine Canadian managers responded to the survey, representing $44.4 billion (in U.S. dollars) in tax-exempt assets.
- The 25 largest dedicated/immunized bond portfolio managers reported a 7.8% increase in assets, to $35.8 billion from $33.2 billion.
- Assets invested by the 25 largest managers of mortgage-backed securities decreased 14.1%, to $23.9 billion from $27.9 billion, although many managers hold the securities as part of their bond portfolios and were unable to break out the exact figures. ■

## PEOPLE

### Managers

Haine

**Dean H. Haine** has been appointed senior vice president and head of the trust division at Commonwealth National Bank, Harrisburg, Pa. Before coming to Commonwealth, Mr. Haine was vice president and chief trust officer of Mellon Bank Delaware, Wilmington.

**E. Wayne Nordberg** has been named senior portfolio manager at Lord, Abbett & Co., New York. Mr. Nordberg, also a member of the investment strategy committee, previously was a senior vice president and manager at Prescott, Ball & Turben Inc.

Helsom

**Frank E. Helsom** has been named president of Templeton Investment Counsel Inc., a subsidiary of Templeton, Galbraith & Hansberger Ltd. Mr. Helsom previously established an asset management group for Citicorp in Chicago, and also worked in several senior managerial positions with the investment management subsidiary of Lincoln National Corp.

**Jackson L. Allen Jr.** has joined Waddell & Reed Asset Management Co., Kansas City, Mo., in the position of vice president-marketing. Previously, Mr. Allen was employed as vice president and director of marketing at First Asset Management, Minneapolis.

Carty

**John L. Carty** has been named senior vice president of Boston Safe Deposit and Trust Co. Mr. Carty is director of marketing and client relations for the institutional markets group. Prior to coming to The Boston Co. in 1985, Mr. Carty worked for 18 years with IBM Corp.

Keating

Also at Boston Safe Deposit, **Christopher P. Keating** has joined the institutional markets group as vice president. He is responsible for investment management marketing for jointly trusteed and public employee retirement funds. Previously he was a personal investment banker in the individual client group.

**Julian C. Jett Jr.** has been appointed vice president-marketing at Chicago-based Fiduciary Management Associates. Prior to joining Fiduciary Management, Mr. Jett was employed as vice president in the investment consulting division of the Atlanta office of Prudential-Bache Securities.

Munson

**Leon J. Munson** has been named a principal of the investment management firm Cadinha & Co., Honolulu. Mr. Munson joined the company in 1985. Previously, Mr. Munson was employed by First Hawaiian Bank.

**Daryle G. Johnson** has been elected senior vice president of pension investment services at Pacific Mutual Life Insurance Co. He is responsible for all aspects of Pacific Mutual's investment products for the pension market. Mr. Johnson replaces **William Cunningham**, who has announced his retirement.

Consemius

**Norbert J. Consemius** has been promoted to president of First Trust, the St. Paul trust subsidiary of Minneapolis-based First Bank System. Mr. Conzemius has been with the bank system for more than 20 years, and most recently was manager of the branch banking system.

Ganley

Columbine Capital Services Inc., Colorado Springs, Colo., has named **Susanne Ganley** vice president responsible for East Coast clients. Previously, she was director of fund sales for Pilgrim Baxter Greig & Associates.

Also at Columbine, **Jeffrey W. Haney** has been named vice president. He will be responsible for clients in the Midwest and Southeast. Prior to joining Columbine, Mr. Haney held positions with subsidiaries of Newtech Development Corp.

**Fred Obser** has been elected senior vice president of Irving Trust Co., New York. He is manager of the equities management division and joined the bank in 1982.

Also at Irving Trust, **Brian J. Keeney** has been elected senior vice president. Mr. Keeney, who is manager of the investment management marketing and sales division, joined the bank in 1985. He previously was employed by New York-based Chase Manhattan Bank.

Mitchell

**James J. Mitchell** has been named executive vice president at the Northern Trust Co., Chicago. Mr. Mitchell joined the bank in 1964 and has overall responsibility for the trust and financial services operations.

Connecticut Investment Management Inc., Old Lyme, Conn., has named **Gerald A. Long** vice president and senior portfolio manager. Previously, Mr. Long was vice president and trust investment manager at Shawmut Home Bank, Meriden, Conn.

Hibbs

**Richard W. Hibbs** has been elected senior vice president-pension and institutional services at Centerre Trust Co. He joined the St. Louis-based firm in 1984 and most recently was vice president and director of pension and institutional services marketing.

Reed

Also at Centerre Trust, **Fredrick T.W. Reed** has been hired as senior consultant and assistant vice president-pension and institutional services. Mr. Reed, who joined Centerre Trust in 1987, previously was president of Reed Employee Benefits Systems Inc., which was acquired by Centerre Trust in 1987.

**Sidney Hansen** is now president of Trident Investment Management Inc., Anaheim, Calif. Mr. Hansen, who has been with Trident since 1983, was named chief executive officer in July 1987.

Bruntjen

**Worth Bruntjen** has joined Piper Capital Management Inc., Minneapolis, as fixed income portfolio manager. He previously worked as a portfolio manager with Alliance Capital Management Corp.

Chase Manhattan Bank has named **Marshall Carter** senior vice president and global custody group executive. He previously worked as executive vice president and group executive at Chase Lincoln First Bank, Rochester, N.Y.

Also at Chase, **Susan Schoen** was named pension trust securities services executive in the service products sector.

Wolff

**William A. Wolff** has joined The New England as second vice president in the group pension product management division. Before joining The New England, Mr. Wolff was employed by CIGNA Corp.

**Robert C. Segee** has joined Income Research & Management Inc., Boston, as vice president. Before joining Income Research, Mr. Segee was a senior vice president-institutional marketing at The Putnam Cos.

**Susan R. Jenson** has joined Fiduciary Capital Management Inc., Woodbury, Conn., as principal. She previously worked as a group pension sales officer for GICs at Connecticut Mutual Life Insurance Co.

Also, **Allison A. Cross** has been named GIC investment specialist at Fiduciary Capital. Ms. Cross had been employed by RCB Trust Co., the investment subsidiary of Rogers, Casey & Barksdale Inc., as trust officer.

**James F. Webb Jr.** has joined First Wachovia Trust Services as vice president and senior sales consultant with the First Wachovia Employee Benefit Services Department, Winston-Salem, N.C. Mr. Webb will be responsible for marketing timberland portfolios and The Timberland Fund. He previously worked with Weyerhaeuser Co. in timberland sales and marketing for institutional investors.

**Jane B. Fisher** has been elected senior vice president in the institutional trust group of First Wachovia Trust Services. Ms. Fisher is manager of master trust in the employee benefit services department.

Prudential Asset Management Co. Inc., Newark, N.J., has named **Pamela C. Scott** director-public funds. Ms. Scott, who will be responsible for investment management marketing to public employee retirement systems in the East and Midwest, previously worked with Irving Trust Co.

**John S. Maurer Jr.** has joined Bank IV Wichita, Kan., as vice president and portfolio manager in the securities management group. Prior to coming to Bank IV, Mr. Maurer was employed as senior vice president at the First National Bank of Lawrence.

Lane

**Francis B. Lane** has been named senior vice president and chief investment officer of Horizon Trust Co., Morristown, N.J. Previously, Mr. Lane was vice president of the investment advisory division of Equitable Life Assurance Society of the United States.

Weber

**Jeffery L. Weber** has been promoted to senior vice president of Merchants Investment Counseling Inc., a subsidiary of Merchants National Corp., Indianapolis. He joined the firm as vice president in 1986.

Key Trust Co. of Alaska, Anchorage, has hired **Vernon E. Sayles** as senior vice president and trust manager. Previously, Mr. Sayles worked in the employee benefits units of National Bank of Alaska and Union Bank of California.

Potomac Asset Management Inc., Washington, has appointed **Frederic M. Smoak** vice president and portfolio manager for fixed-income investments. Before coming to Potomac, Mr. Smoak worked in the fixed-income division of American and European Investments Inc.

Nelson

**John D. Nelson** has been named to head the new public funds division of State Street Bank and Trust Co., Boston. Mr. Nelson had been director of marketing for the master trust services division, which formerly provided custody and bookkeeping services to both public funds and corporate pension funds.

**Donald M. Mykrantz** has joined New York-based Morgan Stanley Asset Management Inc. as a vice president in the high-yield fixed-income department. Prior to joining Morgan Stanley, Mr. Mykrantz was a vice president at Salomon Brothers specializing in high-yield bond research and sales.

Webster Capital Management, New York, has named **William Kamperman** director-investments. Mr. Kamperman previously worked in the New York office of Paris-based Bankerab Internationale de Investments, where he was an options strategist.

**Margaret Toben** has joined The Marine Trust Co., Milwaukee, as an investment officer and senior equity trader. Previously, Ms. Toben was employed in institutional sales and equity sales trading for Kidder, Peabody & Co.

**Gregory S. Miller** has been appointed president of Towle Capital Realty Group, an affiliate of Towle Real Estate Co., Minneapolis. Mr. Miller, formerly a first vice president and manager of the mortgage lending group at Balcor, will direct the group's acquisition of investment-grade real estate. Towle Capital will also provide clients with advisory and management services and work with buyers on syndication and joint ventures. Mr. Miller will also be a senior vice president for Towle Real Estate.

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PENSIONS & May 30, 1988

# InvestmentAge

The newspaper of corporate and institutional investing $4.50 an issue • $99 a year

# Managers running to cash

## $3.1 billion out of markets

By Trudy Ring

Money managers moved at least $3.1 billion to cash from stocks and bonds since the beginning of the year, primarily because of rising interest rates and tight monetary policy.

Market timers and asset allocators interviewed by *Pensions & Investment Age* have moved a total of $2.7 billion out of stocks and $427 million out of bonds.

In many cases, the moves accounted for half to all of the assets each firm has under management.

Major equity moves include:

• Schield Management Co. Timing Service, Denver, moved its $128 million in equity accounts 100% into cash May 19.

• Avatar Associates, New York, reduced its equity allocation to 55% from 100%.

• The $2 billion in tactical asset allocation run by Bankers Trust Co. — Investment Management Group, New York, was at 25% stocks, 44% bonds and 31% cash May 19, down from 94% stocks, 1% bonds and 5% cash April 1.

• Matrix Capital Management Inc., Greenwich, Conn., reduced its equity exposure to 10% for aggressive clients and 35% for conservative clients from an average of 70% within the past month. Most of the move was to cash, a smaller portion to bonds. Matrix has $820 million under management.

• Davis, Weaver & Mendel Inc., Atlanta, moved half of its $220 million in equity accounts to cash during April.

• Lesesne & Co., Atlanta, moved its $60 million under management to cash from equities April 15.

• North American Capital Management Corp., Shawnee Mission, Kan., reduced its equity exposure to 45% from 94% in March. The firm, with $10 million under management, expects to be fully invested in June.

• Simpson Capital Management Co., Philadelphia, put its $12 million in equities into cash in mid-February.

• R.M. Leary & Co. Inc., Denver, switched $18 million of its $20 million under management to money market funds from equity mutual funds be-

*Continued on page 42*

Steven Lauer said rising interest rates caused Bankers Trust to slash equities in its tactical asset allocation accounts.

Polaroid Corp. stock is a hot property among some investors who believe a large award stemming from the company's patent infringement suit against Eastman Kodak could make Polaroid a takeover target.

# Investors hot for a slice of patent award

By Barry B. Burr

Jennison Associates Capital Corp. and Prudential Insurance Co. of America each have bought more than 5% of Polaroid Corp., joining some other money managers with smaller positions in the company that is seeking $5.7 billion from Eastman Kodak Co. for patent infringement.

Both Prudential and Jennison identified their holdings as passive investments, seeking neither control nor influence of management, according to 13(g) filings with the Securities and Exchange Commission in February, the latest data available.

Speculation on the size of Polaroid's award from Kodak has led several analysts and money managers to view the company as a potential takeover target, which, in turn, attracts investors. No one has indicated any interest in taking over the company, however.

One large institutional holder of Polaroid, who asked to remain unnamed, and some analysts drew parallels of the size of the claim with the $3 billion cash settlement Pennzoil Co. received from its suit against Texaco Inc. in April.

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INSIDE

## Spotlight on alternatives — P. 35

The controversy surrounding pension fund investments in junk bonds continues, investors are shifting their attention to natural gas and most venture capital firms continue to stress diversification. *Pensions & Investment Age* examines these and other issues in a special section on alternative investments.

## Privatization future bright — P. 13

Although the Oct. 19 market crash temporarily dampened interest in privatization ... outlook remains good. *Pensions & Investment Age* ... sales of government-owned com...

## Pa... — P. 29

Pati... nance, for spec... ents' Performance Evaluation Report.

# KKR eyeing Texaco

By Curtis Vosti and Trudy Ring

In the midst of the continuing battle between Carl Icahn and Texaco Corp., Kohlberg Kravis Roberts & Co., the leveraged buy-out firm, has reportedly been talking with Texaco about a possible leveraged buy-out of the White Plains, N.Y., oil giant.

A KKR-led buy-out could be complicated by Texaco's South African-related investments because several institutional investors with South Africa-free portfolio requirements are invested in the KKR fund. The buyout might result in the sale of Texaco's South African investments.

It's an issue faced before and likely will be faced again: Many pension funds are bound by state, city or investment board policies prohibiting investments in South Africa-related companies, but leveraged buy-outs are becoming an increasingly attractive investment.

On Friday, Texaco officials rejected Mr. Icahn's offer of $60 per share, an offer made after negotiations between the two on how best to restructure Texaco broke down earlier in the week.

A source close to the proceedings said Texaco's rejection of Mr. Icahn's offer would increase KKR's stature as a potential white knight.

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LATE NEWS

## Official seeks delay of new plan

CHARLESTON, W.Va. — The West Virginia Legislature has instituted a new pension program to aid and eventually replace the financially ailing State Teachers' Retirement System.

George Crum, acting director of the $1 billion Public Employees' Retirement System, however, has asked the governor to delay implementing the plan for one year until anticipated problems can be worked out and staff added. The Legislature is to meet in special session this week to consider the matter.

## Australian tax on funds possible

SYDNEY, Australia — The Australian government proposed sweeping changes in the Australian pension system, including imposing taxes on Australian pension funds that might drive the funds toward Australia equities and passive equity strategies.

Under the government's mini-budget a 15% tax would be imposed on income earned by pension, or superannuation, funds. The tax would be retroactive to May 26.

In addition, a capital gains tax would be imposed on transactions after July 1, which might drive pension funds toward increased use of index funds, with their lower turnover rates, investment experts said.

The tax on fund earnings can be offset if funds receive enough dividends from companies that already have paid the full corporate tax rate on profits, which is proposed to decrease to 39% from 49%. In such cases, investors will be able to claim a 39% tax credit on the dividends.

The tax may cause funds to reduce their foreign holdings, for which no tax credit would be available.

## Hancock relaunches realty pool

BOSTON — John Hancock Properties Inc. is building an open-end commingled fund with $200 million in properties from its $540 million Equity Real Estate Account fund, and will sell ERA's remaining holdings to meet client withdrawal requests.

"This restructuring is the clients' call," and is the best way to handle withdrawals, said Kevin McGuire, Hancock Properties' president. He wouldn't disclose how much is being withdrawn.

## Kraft names Preece's successor

GLENVIEW, Ill. — Alice Peterson has joined Kraft Inc. as assistant treasurer-corporate finance, replacing William H.S. Preece Jr., who left at the end of April.

Ms. Peterson has responsibility for investing Kraft's nearly $2 billion in pension assets and for other corporate finance matters.

She previously was director-corporate finance at Pepsico Inc., Purchase, N.Y., where she worked for four years.

## Drexel unit considering buy-out

PHILADELPHIA — The management of Drexel Burnham Lambert Investment Advisors is considering a buy-out of the firm in an attempt to shed the stigma resulting from a federal investigation of its parent company, industry sources said.

Officials at the Philadelphia-based manager declined to comment; a spokesman for Drexel Burnham Lambert Inc. in New York said comment would be "premature."

As of Jan. 1, the investment management unit had $2.9 billion in assets under management, of which $1.4 billion was tax-exempt. The Securities and Exchange Commission has been investigating the firm's junk bond operations.

## Houston police revamping fund

HOUSTON — The $480 million Houston Police Officers' Pension System hired five money managers, terminated three and is searching for real estate and international managers as part of its recently completed five-year financial plan.

The restructuring will result in an approximate asset mix of 55% domestic equities, 30% bonds, 10% international and 5% real estate and small-capitalization stocks, according to Dalton Baskin, fund chairman. The current asset mix is about 60% stocks, 30% bonds and 10% real estate.

The fund last week hired Beacon Capital Management and Market Research & Management Corp., as active asset allocators; JMC Capital Management and Lehman Management Co. as value-oriented equity managers; and Capital Technology Inc. as a small-cap manager.

All managers will manage $25 million each, except for Capital Technology, which will run $10 million, Mr. Baskin said.

The assets came from three equity managers that were released: Barrow, Hanley, Mewhinney & Strauss, which managed $63 million; Loomis, Sayles & Co. Inc., which managed $62 million; and Waddell & Reed Asset Management Co., which managed $56 million. All were terminated because of poor performance, Mr. Baskin said.

Between $30 million and $40 million of the assets from the terminations will be invested in real estate equity and international stocks with managers hired by July.

DEPARTMENTS


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Vol. 16, No. 12 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1988.

# RCB partners split

## Barksdale to focus on asset management

By Barry B. Burr

STAMFORD, Conn. — Rogers, Casey & Barksdale Inc. is splitting into two separate firms, with Edgar A. Barksdale breaking away to form RCB International Inc., an investment management company without any domestic consulting services.

Stephen Rogers and John F. Casey will remain with the other entity, which has not yet been named. It will serve U.S. clientele, doing domestic and international consulting, and some investment management, run by outside advisers.

The new Rogers Casey firm will retain all 30 U.S. consulting clients, mainly pension funds, and some $1.2 billion in investment management programs. The Rogers Casey investment program has about 15 to 18 clients, mainly large pension sponsors.

Rogers, Casey & Barksdale's split means both entities will run so-called manager of managers investment approaches.

RCB International will get 132 investment management clients (128 tax-exempt institutional investors and four high-net worth individuals) in the United States, Canada and the United Kingdom, with $2.4 billion invested globally. It will not do consulting for U.S. clients, but will do so for foreign clients.

"It's a logical division of the company to areas where the interests of the principals have been for some time," said Mr. Barksdale. "The business has evolved in different directions and it makes sense to split the company. It's an amicable division."

Neither firm will have any control or direct involvement with the other, although Messrs. Rogers and Casey will hold an undisclosed share in RCB International. Mr. Barksdale said their stake will be purchased gradually by executives in RCB International under a reorganization agreement, ultimately making it wholly owned by its key executives in Canada, the United Kingdom and the United States, the three countries in which it will operate.

According to James F. Beasley, Rogers, Casey & Barksdale chief executive officer, Mr. Barksdale is retaining no interest in the new Rogers Casey firm. Messrs. Rogers and Casey will own the firm, along with about five other executives. Mr. Beasley, who will remain with Rogers Casey, said Rogers Casey ownership will be broadened eventually to include

*Continued on page 42*

# Moving up, moving on

Personnel changes are affecting the treasurers' offices and pension staffs at several corporations.

At the same time, one of the best-known names in pension fund real estate investing likely will become a part timer.

• Robert T. Mall, vice president-pension fund investments of Honeywell Inc., Minneapolis, for the past five years, has been named treasurer, resulting in several other staff changes at Honeywell.

• Leon M. Grandcolas, treasurer of Ball Corp., Muncie, Ind., will retire in August after almost 31 years with the company.

• Gloria Griesinger, a former investment analyst for Indianapolis-based Eli Lilly & Co.'s pension fund, has joined Ball Corp. as supervisor-benefit plans.

• Mark Adams, former investment manager for Pacific Telesis Group, San Francisco, has joined Parametric Portfolio Associates, Seattle, in charge of computer support and systems development.

• Michael C. Dolsen has left Blue Cross & Blue Shield Association, Chicago, where he was manager-benefits financing, to take a job with the same title at Brunswick Corp., Skokie, Ill.

• Claude M. Ballard, a partner with Goldman, Sachs & Co., New York, and a pioneer in pension fund real estate investing, probably will cut back his hours at the investment banking firm, although an arrangement has not been finalized.

Mall

Ballard

At Honeywell, Mr. Mall replaces Dean Fjelstul, who is now vice president-finance and administration for Honeywell Europe, Brussels, Belgium.

Debbie W. Veverka, manager-long-term investments for the past seven years, replaces Mr. Mall and will direct investment of Honeywell's $1.9 billion defined benefit assets and the $400 million defined contribution plan.

Jean Wangard has replaced Ms. Veverka as manager-long-term investments. She formerly was in the management development program at IDS Financial Services Inc., Minneapolis.

At Ball, Mr. Grandcolas was on vacation and could not be reached for comment. But Larry Miller, director of public relations, confirmed Mr. Grandcolas will retire.

R. David Hoover, who was named assistant treasurer late last year, is expected to take Mr. Grandcolas' place but has not yet been appointed. Under the corporation's bylaws, an officer has to retire in the month in which he or she turns 65.

In her new position at Ball, Ms. Griesinger will report to Vic Gilla, manager-corporate benefits. The company has $175 million in retirement assets.

Most recently, Ms. Griesinger worked as project manager-distribution systems of Eli Lilly. From 1985 to early 1987, she was

*Continued on page 43*

# School's gain is manager's loss

By Joel Chernoff

AMHERST, Mass. — Morgan Stanley Asset Management Inc. has lost one of its oldest accounts — by its own choice.

Morgan Stanley, New York, resigned a $40 million bond account this spring when Amherst College members tapped Peter A. Nadosy, president Morgan Stanley Asset Management, to become chairman of the college's investment committee.

"You can't really report to yourself," Mr. Nadosy explained.

Subsequently, Amherst hired Mackay-Shields Financial Corp., New York, to manage the account.

The rewards of helping guide the $300 million endowment fund more than offset any loss of income from the account, Mr. Nadosy said.

"It's a pleasure, because you feel you can do some good," he added. "In the long term, if I can help a school like that, the fee is immaterial."

Mr. Nadosy's attachment to Amherst has grown during the years he traveled to this New England town for investment committee meetings. While there, he sat in on classes.

"It was clear it would have been hard to find an alumnus who evinced such an interest" in the college, said James Scott, Amherst's treasurer.

The investment committee, made up mostly of business executive alums, unanimously selected Mr. Nadosy to take on the chairmanship. The post previously was held by Theodore Cross, a private investor, publisher and editor, who had stepped down after 12 years.

**Peter A. Nadosy is using his money management expertise to help Amherst College.**

While Amherst has gained a new investment committee chief, it has lost a stellar bond manager. During the time Morgan Stanley ran the account, from Sept. 1, 1980 through March 31, 1988, the portfolio returned a cumulative 210%, far above the 152.2% return for the Shearson Lehman Hutton Government/Corporate bond

*Continued on page 44*

# Market boon due as Social Security rises

By Joel Chernoff and Nicky Robertshaw

WASHINGTON — Assets of the Social Security trust funds will balance the federal budget deficit by the mid-1990s, buoying both bond and stock markets and providing a desperately needed source of national savings.

Thought to be near the brink of bankruptcy five years ago, the accumulated reserves of the Old Age, Survivors and Disability Insurance Fund now are projected to grow to $109 billion this year, $155 billion in 1989, $1.4 trillion in 2000 and $12 trillion in 2030, according to the "intermediate" set of assumptions issued by the Social Security Administration.

Wall Street hasn't picked up on the staggering capital market implications of that growth.

"The capital markets don't look very far ahead and have a great deal of skepticism" that the assets will accumulate undisturbed by the federal government, said Herbert Stein, a former chairman of the Council of Economic Advisers and senior fellow at the American Enterprise Institute, Washington.

With such a huge source of financing for federal debt because the funds are prohibited from investing in anything except special U.S. Treasury issues, the U.S. government's drain on capital markets might shrink drastically. In fact, the funds' expected growth eventually could overwhelm federal debt markets, and spill over into other areas of the economy, especially if Social Security assets ever are allowed to be used to purchase corporate equities.

"If we talk about $12 trillion, that could easily be more than what's available in federal securities," said James Tobin, a Nobel laureate and Sterling Professor of Economics at Yale University, New Haven, Conn. The total U.S. deficit now is about $2 trillion.

Today's concerns are a far cry from those of the late 1970s and early 1980s, when market economists worried Treasury debt would "crowd out" corporate borrowers.

"In a couple of years, people will be complaining there aren't enough government bonds around," predicted Edward Yardeni, chief economist at Prudential-Bache Securities Inc., New York.

Even the shorter-term potential of the Social Security accumulations have far-reaching implications for Wall Street.

Decreased federal demand for outside capital could result in lower interest rates, meaning cheaper sources of financing for corporations. In turn, equity markets could appear more attractive as relative yields offered by bonds decrease.

Interest rates for long-term bonds could decrease 200 basis points within the next two years, to 7%, and to 5% to 6% within the next five years, Mr. Yardeni said.

Lawrence Kudlow, chief economist for Bear, Stearns & Co. Inc., New York, agreed, noting not only may interest rates drop to 5% to 6%, but also the growing Social Security trust funds will eliminate needs for tax increases.

There are risks as well. If Washington tries to cut back federal

*Continued on page 46*

# $20 billion sought for financing wave

By Marcia Parker

Investment and commercial banking firms and insurers are in the process of raising more than $20 billion from institutional investors to finance a new surge of leveraged buy-outs and corporate restructurings.

The accumulation of money suggests the leveraged buy-out wave that has roiled American industry for five years will continue to change the face of corporations and the capital markets.

Participation in corporate finance investments has become so significant for some investors they are defining the investments as a separate asset class. Edward Regan, New York state comptroller and overseer of the $38.7 billion New York State & Local Retirement System, and Brian Wruble, president of Equitable Capital Management Corp., New York, have been developing selection and evaluation criteria tailored to these corporate finance investments.

The investment pools are attracting institutional investors looking for ways to boost their returns. These institutions are drawn by the high returns earned in previous buy-out funds.

Competition for the institutional dollar and for the deals is raising the returns demanded by the institutions and the prices on some deals.

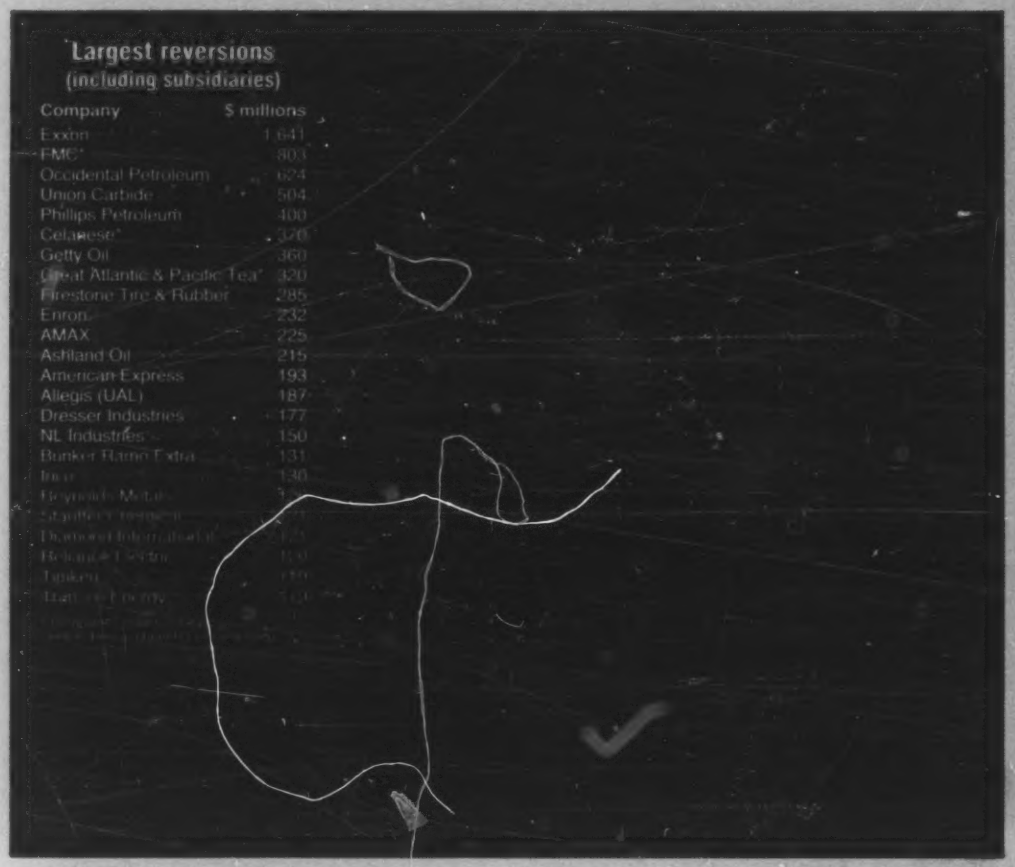
The $20 billion consists of at least $7.5 billion being raised by major investment and commercial banking firms and $12 billion being raised by investment banking boutiques.

Among the fund raisers are Shearson Lehman Hutton Inc., Equitable, Morgan Stanley Group Inc., Manufacturers Hanover Corp., Prudential-Bache Capital Funding and Merrill Lynch Capital Partners.

Others, including First Boston Corp., have billions of dollars available for leveraged buy-outs, but the assets are not in blind pools like its competitors.

Together, they aim to raise more than $7.5 billion from corporations, corporate pension funds, insurance companies and institutional investors from abroad. Fund-raisers were reluctant to identify institutional investors, in part

*Continued on page 45*




**Occidental's plan to recoup $95.5 million is just the latest in a series of terminations. The energy firm has received $528.5 million since 1983, equal to 23% of its cumulative net income from 1983 to 1987.**

# Occidental gets 13th reversion

By Barry B. Burr

Occidental Petroleum Co.'s move to recapture $95.5 million in surplus assets by terminating one of its last remaining pension plans — the largest such reversion in almost a year — could be a sign the termination/reversion era is still alive.

Occidental, a Los Angeles energy concern, is aggressive among corporations in terminating pension plans and recouping assets after it acquires companies.

Including its latest filing, Occidental will have recaptured more than $624 million from terminating 13 plans since 1983. Excluding the pending termination, the $528.5 million Occidental has recaptured is equal to 23% of the company's cumulative net income from 1983 to 1987.

Its pending termination would eliminate nearly all of Occidental's remaining $465 million in pension assets and $332 million accrued liabilities, using an 8% discount rate, according to its financial statements as of Dec. 31.

The plan being terminated — from Midcon Corp., Lombard, Ill., a company Occidental acquired in 1986 — has $382 million in assets and present value liabilities totaling $286.5 million, according to the Pension Benefit Guaranty Corp., Washington.

Pension industry executives are divided on whether terminations will surge again.

"My view is perhaps you will see an increase in terminations," said Stephen Cordy, senior associate-pension group at Morgan Stanley & Co., New York.

He suggested terminations could increase if the economy starts slumping, interest rates rise and tighter restrictions on reversions appear close to enactment in Congress, where two bills are pending.

But Ellen Goldstein, director-public affairs and membership development for the Association of Private Pension and Welfare Plans, the Washington-based corporate trade group, said employers "are not standing around waiting to terminate their plans."

Said Gary Pines, consultant at Towers, Perrin, Forster & Crosby Inc., Chicago: "If anyone is looking at a surplus and deciding whether to terminate and get the money, they definitely have to consider the bills in Congress."

Although passage of the bills is uncertain, sponsors "have got to take into account that at any point in time these bills could pass," Mr. Pines added.

"I don't necessarily subscribe to this view, but I've heard suggestions that because of pending legislation, those considering terminating might want to do it right away because they fear it will be illegal or more restrictive," said Joseph S. Piacentini, research analyst at the Employee Benefit Research Institute, Washington.

"There are so many variables it's hard to say what the trend will be," he added.

The bills, pending in subcommittees in the Senate and House, would place a one-year moratorium on recaptures until Congress decides if reversions should be shared with beneficiaries (*Pensions & Investment Age*, March 7).

The bills, HR 4111 and S 2284, "stop everything from going on for a year until new legislation is put in place," said Kelly Ring, research assistant for the retirement income and employment subcommittee of the House Select Committee on Aging.

That new legislation could be HR 1942, introduced last year by Rep. Edward Roybal, D-Calif., chairman of the committee on aging. The bill, pending before a subcommittee, would disallow any corporate reversions, requiring all surplus assets go to beneficiaries.

The APPWP's Ms. Goldstein said "passage seems unlikely this year" for the moratorium bills. "They've seemed to have stalled; I don't know why."

"The position of employers has been made clear all along; the assets belong to them," she said.

"They take the risk in good times and bad, and they don't want legislation restricting their control of their assets.

"Most pension sponsors don't want to terminate their plans."

With its latest move, Occidental tied with Dresser Industries Inc., Dallas, for the most plan terminations, according to PBGC data since December 1983.

Dresser has recaptured $177.2 million in its 13 plan terminations between 1985 and 1987.

AMAX Inc., Greenwich, Conn., the next most prolific terminator, has recaptured $224.5 million in reversions from 10 plans between 1983 and 1987.

Only two other companies have recaptured more from reversions than Occidental.

Exxon Corp., New York, recaptured the largest amount ever, $1.64 billion in 1986; and FMC Corp., Chicago, recovered $803 million, including $470 million in FMC stock, in 1985. FMC, however, was required to pay an undisclosed share of the reversion to the Department of Defense, under a rule imposed in 1986 on defense contractors.

Overall, corporate terminations of overfunded plans have been slowing because of new fed-

*Continued on page 43*

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# GTE fee change hits few bumps

STAMFORD, Conn. — Although one management firm reportedly has balked, the $11 billion GTE Corp. pension fund is encountering little resistance to converting its 24 domestic equity managers to performance-based fees, GTE's pension chief said.

"It's taking a little time, but we're still working with everyone, and it's still on schedule," said John Carroll, president of GTE Investment Management Corp., Stamford, Conn.

One manager reportedly proposed cutting fees by 25% to avoid performance fees. The identity of the manager could not be learned, and Mr. Carroll declined to comment on that report.

"It's not appropriate for us to comment on a manager's strategy," he said. "I can say that all of our managers are still with us. Many have agreed (to performance-based fees), and we are working with the others.

"We're doing this in stages, and we expect to have everyone completed by the end of the year."

Investment management consultants say they have experienced no increase in inquiries regarding performance-based fees; fees are negotiated on a case-by-case basis by the pension funds and their managers.

GTE managers contacted by *Pensions & Investment Age* seemed amenable to the conversion to performance-based fees.

"I think that unless it's really off the wall, most managers go along" with performance-based fees, said Frank Houghton, chairman, BMI Capital Corp., New York.

## CORRECTIONS

• In a May 16 article, **Oppenheimer Capital Corp.**'s performance for the 12 months ended March 31 was identified incorrectly as its performance for the year ended Dec. 31. For calendar year 1987, Oppenheimer returned 4.8%.

• In a May 16 story, the amount of tax-exempt assets managed by **Ariel Capital Management Inc.**, Chicago, was incorrect. The correct figure is $353 million.

• The May 23 profile on **The Principal** contained incorrect data. The correct profile follows:

**The Principal**
711 High St., Des Moines, Iowa 50309; (515) 247-5041

| | |
|---|---|
| Total assets managed | $18,216,000,000 |
| Tax-exempt assets managed: | |
| Total | $12,209,000,000 |
| Pooled accounts | $829,000,000 |
| GICs | $4,175,000,000 |
| Annuities | $2,930,000,000 |
| Other | $4,275,000,000 |
| 401(k)/457 assets managed | $1,865,000,000 |
| 401(k)/457 clients | 3,353 |
| Real estate assets | $218,800,000 |
| International assets managed | $18,000,000 |
| Tax-exempt clients | 3,534 |
| Types of accounts managed | CEG |

The Principal is an equity, fixed-income, balanced, real estate, international and GIC manager.

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The separate account asset mix Jan. 1 was 2% stocks, 2% bonds, 59% cash, 10% equity real estate, 16% mortgages and 11% private placements; $18 million was in foreign stocks.

The parent is The Principal Financial Group.

Roy Ehrle, executive vice president, is the chief investment officer; F. Doug Rasmussen is client contact.

• **J.P. Morgan Investment Management Inc.**'s international assets were incorrectly stated in the May 23 issue. Its $2.9 billion would have placed the firm third in the list of the 25 largest managers of international assets.

• **Batterymarch Financial Management** ranks 58th among the nation's 100 largest investment managers. Its position was incorrect in the May 23 issue.

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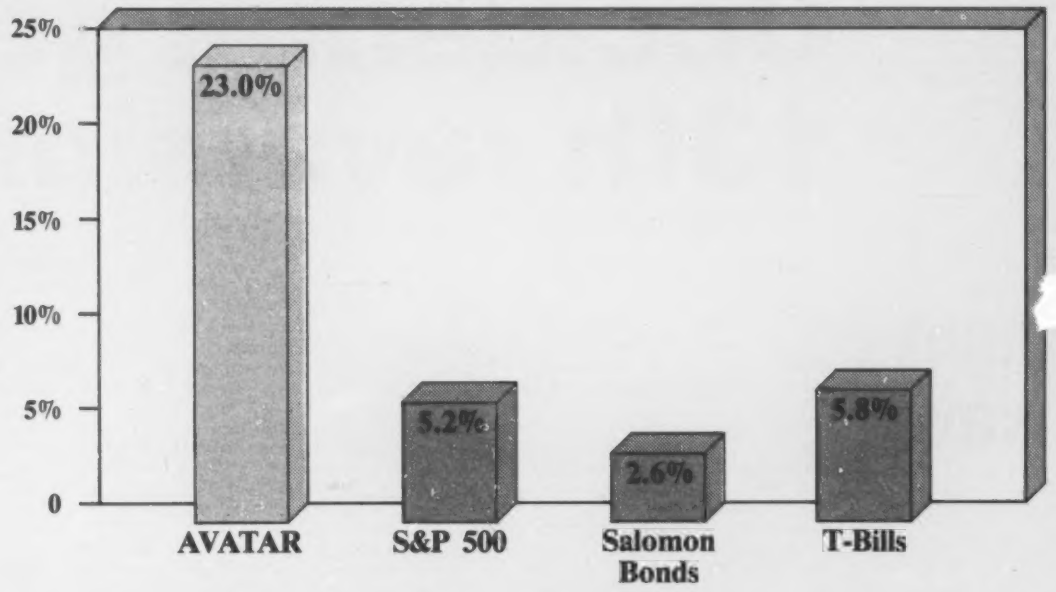


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PIPER

# Takeover fever fuels winners

By Curtis Vosti

Patience — and a little help from takeover frenzy — helped some bank and insurance company commingled special equity funds climb to the top of Pensions and Investments' Performance Evaluation Report for the first quarter.

The $8.3 million Diversified Special Value fund of First Wachovia Bank, Winston-Salem, N.C., was the top performer of the 106 special equity funds tracked by PIPER, with a 25.2% return for the quarter.

In comparison, the median PIPER fund returned 12.2%; the Standard & Poor's 500 stock index, 5.7%; and the Russell 2000, 18.7%.

First Wachovia's fund contains about 30 stocks, said George M. Salley, First Wachovia vice president and senior portfolio manager. It stresses companies with low price-book and price-earnings ratios and unrealized value.

"I'll buy a stock and stick with it until something happens," Mr. Salley said. The fund's top performers in the quarter included **Stop & Shop Companies Inc.** and regional banks such as **Fidelity Federal S&L Association** and **Atlantic American Corp.**, he said.

First Wachovia's fund also has holdings in **The Williams Cos.**, and **Zayre Corp.**, he said.

The $26 million Supplemental Equity fund of Connecticut National Bank, Hartford, ranked second for the quarter with a 23.9% return.

The fund consists of approximately 100 stocks, according to Peter Larson, vice president. Mr. Larson attributed the fund's strong performance to two main factors: a willingness to stay relatively fully invested and the fund's small-capitalization characteristics.

He said the fund's performance was helped by 10 takeovers during the quarter, although he finds a dark side to that success.

"I don't like the stigma of being thought of as a takeover fund," he said. "Most (of our stocks) are long-term holdings. We just got hit by mergermania."

For example, he said, **Grolier Inc.**, **North American Communications Corp.** and **Dickey-john Inc.** were holdings that performed well in the first quarter in after being the subjects of takeovers.

"The whole idea is to get some sense of the company before" Wall Street does, Mr. Larson said.

Historically, the fund has had a pretty good position in New England banks, he said, and they experienced a strong January.

Other significant holdings in the fund are **Intermec Corp.**, **Intermedics Inc.**, **Cordis Corp.** and **Weigh-Tronix Inc.**

"People always laugh at the names, but there is some substance there," he said. "We try to be patient with these things."

The Uncommon Value equity fund of Manufacturers Hanover Trust Co., New York, finished third for the quarter at 23%.

Dorik Rozanski, vice president for Mitchell Hutchins Institutional Investors Inc., New York, which manages the fund for Manufacturer's Hanover, said it's a long-term, value-oriented, fairly consistent portfolio with an affinity for high-quality, overlooked

*Continued on page 31*

**Special equity funds**
**(periods ended March 31, 1988)**

| | 1st qtr. | 1 yr. | 3 yr. | 5 yr. | 10 yr. |
|---|---|---|---|---|---|
| Highest return | 25.2% | 20.4% | 42.5% | 40.4% | 26.1% |
| First quartile | 15 | −2.8 | 17.2 | 14.2 | 19.5 |
| Median | 12.2 | −9.6 | 13.1 | 10.5 | 17.5 |
| Third quartile | 9.1 | −14.5 | 8.5 | 6.5 | 16 |
| Lowest return | −3.9 | −33.7 | −2.2 | −2.7 | 13.5 |
| S&P 500 | 5.7 | −9.4 | 16.8 | 15.6 | 16.6 |
| Russell 2000 | 18.7 | −13.4 | 9.3 | 8.7 | NA |

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# Funds shifting to Hong Kong

By Marlene Givant

Leading international stock managers included in the Pensions & Investments' Performance Evaluation Report are placing big bets on Hong Kong and Australia, diverting money from the pricey Japanese market.

Managers of PIPER's foreign bond funds, which generally lagged the equity funds, have mixed views on the U.S. dollar, however.

Among those with renewed confidence in Hong Kong, which closed temporarily following Oct. 19, and Australia, which also was battered in the stock market crash, are Confederation Life Insurance Co., which had PIPER's top return for the quarter and year ended March 31, and Provident Capital Management, Philadelphia.

In addition, the $45 million International Stock Portfolio of Wellington Management Co./ Thorndike, Doran, Paine & Lewis, Boston, is putting new cash flow from Japan into Singapore and Europe.

Equity funds re-emerged as top performers among international and global commingled funds in the first quarter. The $3 million International Common Stock fund of Confederation Life, managed from Toronto, returned 16.49% and 26.83% for the quarter and year ended March 31, beating the Morgan Stanley Capital International Europe Australia Far East index's 15.31% and 16.79% for those periods.

Ranking second for the quarter and year, Wellington's $6 million Pacific Basin portfolio returned 15.95% and 24.57%. The firm's International Stock Portfolio was third for the quarter among active managers, returning 11.33% while Provident's $65 million International Low P/E Equity Fund ranked third for the year at 23.22%.

Japan is once again affecting strategies. Confederation Life is increasing its exposure to inexpensive Australia and Hong Kong as Japan, in which it invests 35% to 40%, becomes more costly, said Ian Fyfe, portfolio manager. The insurer's fund has 10% in Australia and 5% in Hong Kong. It also has 9% in Holland, in companies like **Nedlloyd**, a shipping company. **Fuji Machine**, a Japanese machine tool company, also was a top-performing holding.

Wellington has 43% in Japan in such companies as **Kokusa Electric**, but is putting incremental cash flow from Japan into Singapore and Spain because those markets should grow faster in the second quarter, said Jerry Mitchell, senior vice president.

Its Pacific Basin fund's biggest weightings include 62% in Japan and 9% in Australia.

Provident Capital might increase Australia to 6% from 4% because it expects commodity inflation to benefit the market. It has pared Japan to 42% from 44% with a target of 40% by June. Provident sold **Morozoff**, a food company, which was up 80% in April alone and **Takasago Thermo**, which makes large air-conditioning systems. It boosted its U.K. holdings to 19%, buying **Dixons PLC**, a retailer of electrical appliances, said Sandor Cseh, vice president.

"We're moving to a more defensive position in Japan. Utilities are 10% of our Japanese portfolio. The market will have a correction some time in the summer. It's more overvalued than it was just before the crash and now nobody seems to be concerned," he said.

For longer periods, index funds prevailed. For the three years ended March 31, index funds managed by American National Bank & Trust Co. of Chicago,

*Continued on page 32*

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## Top quartile commingled special equity funds

### 3-month returns

| | % |
|---|---|
| First Wachovia (Div.), N.C. | 25.2 |
| Connecticut Nat'l Bank (Sup.) | 23.9 |
| Manufacturers Hanover (Uncom.) | 23.0 |
| Irving Trust (II), N.Y. | 21.7 |
| Trust Co. of the West (Value add) | 21.5 |
| Wellington Trust (Emerg. tech.) | 21.1 |
| First of Neenah (Reg.), Wis. | 20.8 |
| EF Hutton (5), Del. | 20.0 |
| First of Maryland | 19.7 |
| Wellington (Emerg. non-tech) | 19.4 |
| Fidelity Mgmt. Trust (Small co.) | 19.1 |
| **Russell 2000** | **18.7** |
| General American (II), Mo. | 18.0 |
| Chemical Bank (Emerg. F), N.Y. | 17.4 |
| Citicorp (Emerg. health care), N.Y. | 17.1 |
| Morgan Guaranty (Sup. opp.) | 16.6 |
| Provident Nat'l, Pa. | 16.1 |
| Citicorp (Sp. sit.), N.Y. | 16.0 |
| Chase Manhattan, N.Y. | 15.9 |
| First of Neenah (Cap. appre.) | 15.7 |
| Harris Trust (Sp. cap.), Ill. | 15.6 |
| Merchants Nat'l, Pa. | 15.5 |
| Texas Commerce | 15.3 |
| Centerre Trust (P-1), Mo. | 15.2 |
| Planters Nat'l (Carolinas), N.C. | 15.0 |
| **Standard & Poor's** | **5.7** |

### 1-year returns

| | % |
|---|---|
| First RepublicBank (Sel.), Texas | 20.4 |
| First of Neenah (Reg.), Wis. | 7.8 |
| First City Nat'l Houston (G-1) | 7.6 |
| First of Chicago (Inst.) | 6.7 |
| First Trust, Minn. | 6.3 |
| Citicorp (Resources), N.Y. | 5.7 |
| First of Minneapolis (20) | 5.2 |
| EF Hutton (5), Del. | 4.2 |
| First of Maryland | 2.8 |
| EF Hutton (Gro. B), Del. | 2.5 |
| Crestar Bank | 1.4 |
| Manufacturers Hanover (Uncom.) | 0.9 |
| Phoenix Mutual (Gro. S), Conn. | −0.3 |
| Morgan Guaranty (Sup. opp.) | −0.3 |
| First of Neenah (Worldwide) | −0.5 |
| EF Hutton (Emerg. B), Del. | −0.6 |
| Society Nat'l (Ohio reg.), Ohio | −1.0 |
| Citicorp (Sp. sit.), N.Y. | −1.0 |
| Central Fidelity (Agg.), Va. | −2.1 |
| Wellington Trust (Emerg. tech.) | −2.2 |
| Connecticut Nat'l Bank (Sup.) | −2.3 |
| Banc One Asset Mgmt., Ohio | −2.8 |
| **Standard & Poor's** | **−8.4** |
| **Russell 2000** | **−13.4** |

### 3-year returns

| | % |
|---|---|
| First RepublicBank (Sel.), Texas | 42.5 |
| EF Hutton (Emerg. B), Del. | 39.9 |
| EF Hutton (Gro. B),Del. | 38.8 |
| First of Neenah (Reg.), Wis. | 30.4 |
| Putnam Fiduciary (Putnam gro.) | 21.4 |
| Chase Manhattan (Inter. cap.) | 20.8 |
| Security Pacific (Gro. G), Calif. | 20.4 |
| Manufacturers Hanover (Sup.) | 20.3 |
| Central Fidelity (Agg.), Va. | 20.3 |
| Society Nat'l (Earnings), Ohio | 20.3 |
| EF Hutton (5), Del. | 20.3 |
| Society Nat'l (Ohio reg.), Ohio | 20.2 |
| Fidelity Mgmt. Trust (Agg.), Mass. | 20.0 |
| Harris Trust (Sp. cap.), Ill. | 20.0 |
| Norwest Bank (Sp. invt.), Minn. | 19.3 |
| First of Minneapolis (20) | 18.1 |
| Connecticut Nat'l Bank (Sup.) | 17.9 |
| Trust Co. of the West, Calif. | 17.6 |
| California First Bank (Sup.) | 17.3 |
| Manufacturers Hanover (Uncom.) | 17.2 |
| **Standard & Poor's** | **16.8** |
| **Russell 2000** | **9.3** |

### 5-year returns

| | % |
|---|---|
| First RepublicBank (Sel.), Texas | 40.4 |
| Fidelity Mgmt. Trust (Agg.), Mass. | 18.9 |
| Manufacturers Hanover (Uncom.) | 17.6 |
| Society Nat'l (Ohio reg.), Ohio | 17.0 |
| Trust Co. of the West, Calif. | 16.1 |
| Citicorp (Real estate), N.Y. | 15.8 |
| First of Minneapolis (20) | 15.8 |
| **Standard & Poor's** | **15.6** |
| LaSalle Nat'l (Small cap.), Ill. | 15.5 |
| First Wachovia (Div. sp. value) | 15.5 |
| Chase Manhattan (Inter. cap.) | 15.4 |
| First Wisconsin Asset (Gro. B) | 15.2 |
| First Trust, Minn. | 14.8 |
| First of Maryland | 14.7 |
| Citicorp (Sp. sit.), N.Y. | 14.6 |
| Manufacturers Hanover (Sup.) | 14.4 |
| Connecticut Nat'l Bank (Sup.) | 14.3 |
| Shawmut Bank (Target), Mass. | 14.2 |
| **Russell 200** | **8.7** |

### 10-year returns

| | % |
|---|---|
| California First Bank (Sup.) | 26.1 |
| MTrust (Growth), Texas | 23.8 |
| Norwest Bank (Sp. invt.), Minn. | 21.9 |
| First of Maryland | 21.7 |
| Citicorp (Sp. sit.), N.Y. | 21.0 |
| Chase Manhattan (Inter. cap.) | 21.0 |
| Bank of America, Calif. | 20.4 |
| Manufacturers Hanover (Sup.) | 20.4 |
| First Wisconsin Asset (Gro. B) | 19.5 |
| **Standard & Poor's** | **16.6** |

## Commingled International

### 3-month returns

| | % |
|---|---|
| Confederation Life (Stock), Ga. | 16.5 |
| Wellington Trust (Pacific Basin) | 16.0 |
| State Street Bank (Index), Mass. | 15.3 |
| **MSCI EAFE Index** | **15.3** |
| Wells Fargo (Eq.), Calif. | 15.2 |
| American Nat'l Chicago (Eq.) | 14.7 |
| Travelers (Index), Conn. | 14.7 |
| Prudential (Foreign stock), N.J. | 14.6 |
| Chase Investors (EAFE Index) | 13.8 |
| **MSCI World Index** | **11.7** |
| Wellington Trust (Stock), Mass. | 11.3 |
| Chase Manhattan (Global), N.Y. | 11.1 |
| U.S. Trust (Eq.), N.Y. | 10.9 |
| Bessemer Trust (E), N.Y. | 10.5 |
| Harris Trust (Eq.), Ill. | 10.3 |
| Citicorp (Eq.), N.Y. | 10.2 |
| Centerre Trust (Coll. W), Mo. | 10.0 |
| Provident Nat'l (Low p/e), Pa. | 9.5 |
| PCM Int'l (Print), N.J. | 9.0 |
| First of Chicago (Eq.) | 8.8 |
| IDS Trust (Eq.), Minn. | 7.4 |
| Morgan Guaranty (Eq.), N.Y. | 7.0 |
| Marine Midland (Eq.), N.Y. | 6.7 |
| WorldInvest Ltd. (Eq.) | 6.7 |
| Bankers Trust (Eq.), N.Y. | 5.8 |
| Travelers Insurance (Eq.), Conn. | 5.5 |
| Aetna (AMAM-eq.), Conn. | 5.4 |
| Connecticut Mutual (CM overseas) | 4.8 |
| Putnam Fiduciary (Trust) | 4.5 |
| PCM Int'l (Global bond), N.J. | 4.2 |
| California First (Invt. eq.) | 4.1 |
| Principal Mutual (SA eq.), Iowa | 4.1 |
| Fidelity Mgmt. (Overseas eq.) | 3.2 |
| CIGNA Corp. (Eq.), Conn. | 2.9 |
| PCM Int'l (Global yield), N.J. | 2.6 |
| WorldInvest Ltd. (Fixed) | 2.0 |
| PCM Int'l (Foreign bond), N.J. | 1.9 |
| Morgan Guaranty (Bond), N.Y. | 1.3 |
| IAA Trust (CTF-I), Ill. | 1.2 |
| First of Chicago (Non-$ fixed) | 0.1 |
| Citicorp (Fixed), N.Y. | −2.4 |

### 1-year returns

| | % |
|---|---|
| Confederation Life (Stock), Ga. | 26.8 |
| Wellington Trust (Pacific Basin) | 24.6 |
| Provident Nat'l (Low p/e), Pa. | 23.2 |
| PCM Int'l (Foreign bond), N.J. | 22.9 |
| First of Chicago (Non-$ fixed) | 22.7 |
| PCM Int'l (Global bond), N.J. | 22.7 |
| WorldInvest Ltd. (Fixed) | 22.1 |
| PCM Int'l (Global yield), N.J. | 18.4 |
| Wells Fargo (Eq.), Calif. | 17.8 |
| Prudential (Foreign stock),N.J. | 17.2 |
| **MSCI EAFE Index** | **16.8** |
| State Street Bank (Index), Mass. | 16.8 |
| Morgan Guaranty (Bond), N.Y. | 16.5 |
| Harris Trust (Eq.), Ill. | 16.3 |
| Chase Investors (EAFE index) | 16.0 |
| Bankers Trust (Eq.), N.Y. | 15.5 |
| American Nat'l Chicago (Eq.) | 15.4 |
| Travelers Insurance (Eq.), Conn. | 15.2 |
| First of Chicago (Eq.) | 11.6 |
| U.S. Trust (Eq.), N.Y. | 10.0 |
| California First (Invt. eq.) | 9.6 |
| Citicorp (Fixed), N.Y. | 9.5 |
| Centerre Trust (Coll. W), Mo. | 7.8 |
| Chase Manhattan (Global eq.) | 7.5 |
| Putnam Fiduciary (Trust) | 6.5 |
| **MSCI World Index** | **6.3** |
| CIGNA Corp. (Eq.), Conn. | 6.3 |
| Connecticut Mutual (CM overseas) | 5.1 |
| Morgan Guaranty (Eq.), N.Y. | 4.9 |
| Bessemer Trust (E), N.Y. | 4.7 |
| Citicorp (Eq.), N.Y. | 3.5 |
| Marine Midland (Eq.), N.Y. | 1.9 |
| Wellington Trust (Stock) | 1.8 |
| Aetna (AMAM-eq.), Conn. | 0.8 |
| IDS Trust (Eq.), Minn. | −3.3 |
| PCM Int'l (Print), N.J. | −4.1 |
| Fidelity Mgmt.(Overseas), Mass. | −8.0 |
| WorldInvest Ltd. (Eq.) | −11.2 |

### *3-year returns*

| | % |
|---|---|
| American Nat'l Chicago (Eq.) | 52.1 |
| **MSCI EAFE Index** | **51.8** |
| State Street Bank (Index), Mass. | 51.4 |
| Wells Fargo (Eq.), Calif. | 50.8 |

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# Takeovers

*Continued from page 29*

stocks that are bought at big discounts to intrinsic value.

"These are not widely held institutional stocks," Mr. Rozanski said, adding the stocks are key players in their respective industries.

He declined to identify the approximately 40 stocks in the $90 million fund.

For the longer periods, one fund ranked first in the one-, three- and five-year periods ended March 31: the Select Equity Fund offered by FirstRepublic Bank, Dallas.

The $15 million fund had returns of 20.4%, a compound annualized 42.5% and an annualized 40.3%, respectively.

The median returns for the same periods were, respectively, −9.6%, an annualized 13.1% and an annualized 10.5%; the S&P 500 returns were −8.4%; 16.8% and 15.6%; and the Russell 2000 returns, −13.4%, 9.3% and 8.7%.

"We came off two extraordinary back-to-back years," said Ben Fischer, senior vice president and director of the bank's investment asset management group, referring to returns of 70% in 1986 and 69.5% in 1987.

The fund performed below the median for the quarter, with a 10.6% return, although that still topped the S&P 500.

Mr. Fischer said the $15 million fund is usually concentrated in less than 10 stocks, which are chosen from a value screen that stresses low p/e ratios. A high turnover rate — typically 300% and at times as high as 450% a year, he said — keeps Mr. Fischer a busy man.

Among stocks sold in the first quarter, he said, were **Arkansas Best Corp.**, **Ferro Corp.**, **IBM Corp.**, **Digital Equipment Corp.** and **Chrysler Corp.** New buys include **Hospital Corp. of America**, **Textron Inc. and Gould Inc.**

One of the most consistent performers in the past years has been the Regional Bank fund offered by First of Neenah, now a part of Associated Banc-Corp of Wisconsin.

The 4-year-old fund finished among the top seven funds for the quarter, year and three-year periods, with respective returns of 20.8%, 7.8% and an annualized 30.4%.

The fund, as its name suggests, holds bank stocks, primarily regional banks in the $1 billion to $3 billion range, according to Kenneth J. Brusda, vice president and trust investment officer. First of Neenah looks at p/e and price/book ratios and also at takeover candidates.

"Every bank we hold we would consider a takeover candidate," Mr. Brusda said. "We still feel very strongly about the concept."

In the quarter, a couple of the fund's banks, **Citizens Financial Group Inc.** and **Unibancorp Inc.**, were the object of takeovers, he said.

"These acquisitions have occurred pretty regularly," he said. "These have been helpful, but the banks in general have been more popular."

The fund has a little more than $10 million, with holdings in about 18 banks nationwide, although 98% of them are east of the Mississippi, he said.

Mr. Brusda said he "feels very strongly" that **Signet Banking Corp.** is the most attractive takeover candidate among the fund's holdings.

Signet itself was born of a takeover. About four years ago, First of Neenah bought stock in Union Trust Bancorp of Maryland, which subsequently merged with Bank of Virginia Co., and they changed the name to Signet.

Patience was a virtue for the $16 million supplemental equity fund of California First Bank, San Diego. It's small-cap, emerging growth fund was the top performer for the 10 years, with an annualized 26.11% return.

For the same period the median PIPER fund returned an annualized 17.47%, while the S&P 500 returned 16.6%. The Russell 2000 doesn't go back that far.

"We've basically had the same principles for more than 10 years," said David Urben, funds manager for California First. "You're trying to catch the stocks in the early stages of its growth cycle and hope to be gone by the time it becomes cyclical," he said.

**Liz Claiborne Inc.**, New York, has been the leading stock for First California in the long term, Mr. Urben said, although it's not as important to the portfolio now.

In the quarter, First California's portfolio of about 47 stocks was led by **Advanced Marketing Services**, San Diego, and **Flight Group International**, Atlanta. ■

| | |
|---|---|
| Fidelity Mgmt. (Overseas eq.) | 49.2 |
| WorldInvest Ltd. (Eq.) | 49.1 |
| Wellington Trust (Pacific Basin) | 47.0 |
| Bessemer Trust (E), N.Y. | 46.5 |
| Marine Midland (Eq.), N.Y. | 45.3 |
| Chase Manhattan (Global eq.) | 45.2 |
| Bankers Trust (Eq.), N.Y. | 44.7 |
| Citicorp (Eq.), N.Y. | 44.4 |
| First of Chicago (Eq.) | 44.0 |
| CIGNA Corp. (Eq.), Conn. | 42.4 |
| Centerre Trust (Coll. W.), Mo. | 42.1 |
| U.S. Trust (Eq.), N.Y. | 41.5 |
| California First (Invt. eq.) | 40.7 |
| Aetna (AMAN-eq.), Conn. | 40.7 |
| IDS Trust (Eq.), Minn. | 39.3 |
| Morgan Guaranty (Eq.), N.Y. | 38.6 |
| Putnam Fiduciary (Trust) | 38.4 |
| Wellington Trust (Stock) | 38.4 |
| WorldInvest Ltd. (Fixed) | 38.3 |
| PCM Int'l (Global bond), N.J. | 36.9 |
| PCM Int'l (Foreign bond), N.J. | 36.5 |
| First of Chicago (Non-$ fixed) | 36.2 |
| **MSCI World Index** | **34.1** |
| Citicorp (Fixed), N.Y. | 31.8 |
| Morgan Guaranty (Bond), N.Y. | 30.2 |

**5-year returns**

| | % |
|---|---|
| **MSCI EAFE Index** | **37.3** |
| American Nat'l Chicago (Eq.) | 36.6 |
| Wells Fargo (Eq.), Calif. | 36.4 |
| Wellington Trust (Pacific Basin) | 35.2 |
| Bankers Trust (Eq.), N.Y. | 33.4 |
| WorldInvest Ltd. (Eq.) | 31.5 |
| First of Chicago (Eq.) | 30.5 |
| Citicorp (Eq.), N.Y. | 29.6 |
| Centerre Trust (Coll. W), Mo. | 29.2 |
| IDS Trust (Eq.), Minn. | 29.2 |
| U.S. Trust (Eq.), N.Y. | 29.1 |
| Wellington Trust (Stock), Mass. | 28.0 |
| Bessemer Trust (E), N.Y. | 27.2 |
| Putnam Fiduciary (Trust) | 26.9 |
| **MSCI World Index** | **26.0** |
| Morgan Guaranty (Eq.), N.Y. | 26.0 |
| PCM Int'l (Global bond), N.J. | 24.6 |
| Chase Manhattan (Global eq.) | 23.8 |
| PCM Int'l (Foreign bond), N.J. | 22.3 |
| First of Chicago (Non-$ fixed) | 21.8 |
| WorldInvest Ltd. (Fixed) | 21.6 |
| Morgan Guaranty (Bond), N.Y. | 19.2 |
| Citicorp (Fixed), N.Y. | 18.2 |

**10-year returns**

| | % |
|---|---|
| **MSCI EAFE Index** | **23.4** |
| U.S. Trust (Eq.), N.Y. | 23.3 |
| First of Chicago (Eq.) | 20.5 |
| **MSCI World Index** | **20.1** |
| Morgan Guaranty (Eq.), N.Y. | 19.0 |

Profiles of the leading investment management consultants will be published in the Oct. 17 issue of *Pensions & Investment Age*.

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PIPER

# Hong Kong

*Continued from page 29*

State Street Bank & Trust Co., Boston, and Wells Fargo Investment Advisors, San Francisco, had compound annualized returns of 52.05%, 51.37% and 50.79%, respectively, vs. the EAFE's 51.84%.

For the five years, American National's $220 million fund was up an annualized 36.63% and Wells Fargo's $624 million reached 36.4% vs. the EAFE's 37.26%.

The top active portfolio for three years, Boston-based Fidelity Management Trust's $100 million Overseas Equity fund logged a 49.24% compound annualized return, followed by London-based WorldInvest Ltd.'s $56 million International Employee Benefit Equity fund with 49.05%. Wellington's Pacific Basin fund was third with 47.22%.

For five years, the Wellington fund also excelled with 35.21% followed by New York-based Bankers Trust Co. — Investment Management Group's International Equity fund with 33.4% and WorldInvest's equity fund's 31.47%.

Fidelity's three-year return incorporates the returns of the Fidelity Overseas mutual fund up to April 1, the day the commingled fund was transferred to the mutual fund's management team from Fidelity International Investment Advisors, Boston, a separate company.

The fund has been up and down in Japan from 65% in early 1987 to 25% post-crash to 50% now. It has been fully invested since the beginning of the year and invests 10% in Spain, said Robert L. Reynolds, senior vice president.

WorldInvest has a mammoth, 18% exposure to the small Spanish market. It has nothing in Japan, 25% in the United Kingdom and more than 20% in deutsche mark, yen and sterling cash. It expects U.K. companies to enjoy Europe's consumer growth and is buying financial stocks like French insurer **Group Victoire** because European interest rates are falling, said Ali Ansari, investment manager.

Bond funds generally lagged equities during the quarter but the top bond fund, Newark, N.J.-based PCM International's $200 million Global Bond fund beat some equity funds returning a hefty 4.23%. The firm's $85 million Global Yield fund, which invests in short-term instruments, followed with 2.58% and WorldInvest's $40 million International Employee Benefit Fixed Income fund ranked third among bond funds with a 2.01% return.

For periods ended March 31, the Salomon Brothers Non-U.S. Dollar World Government Bond index returned 1.09% for the quarter, 20.42% for the year and a compound-annualized 33.29% for three years.

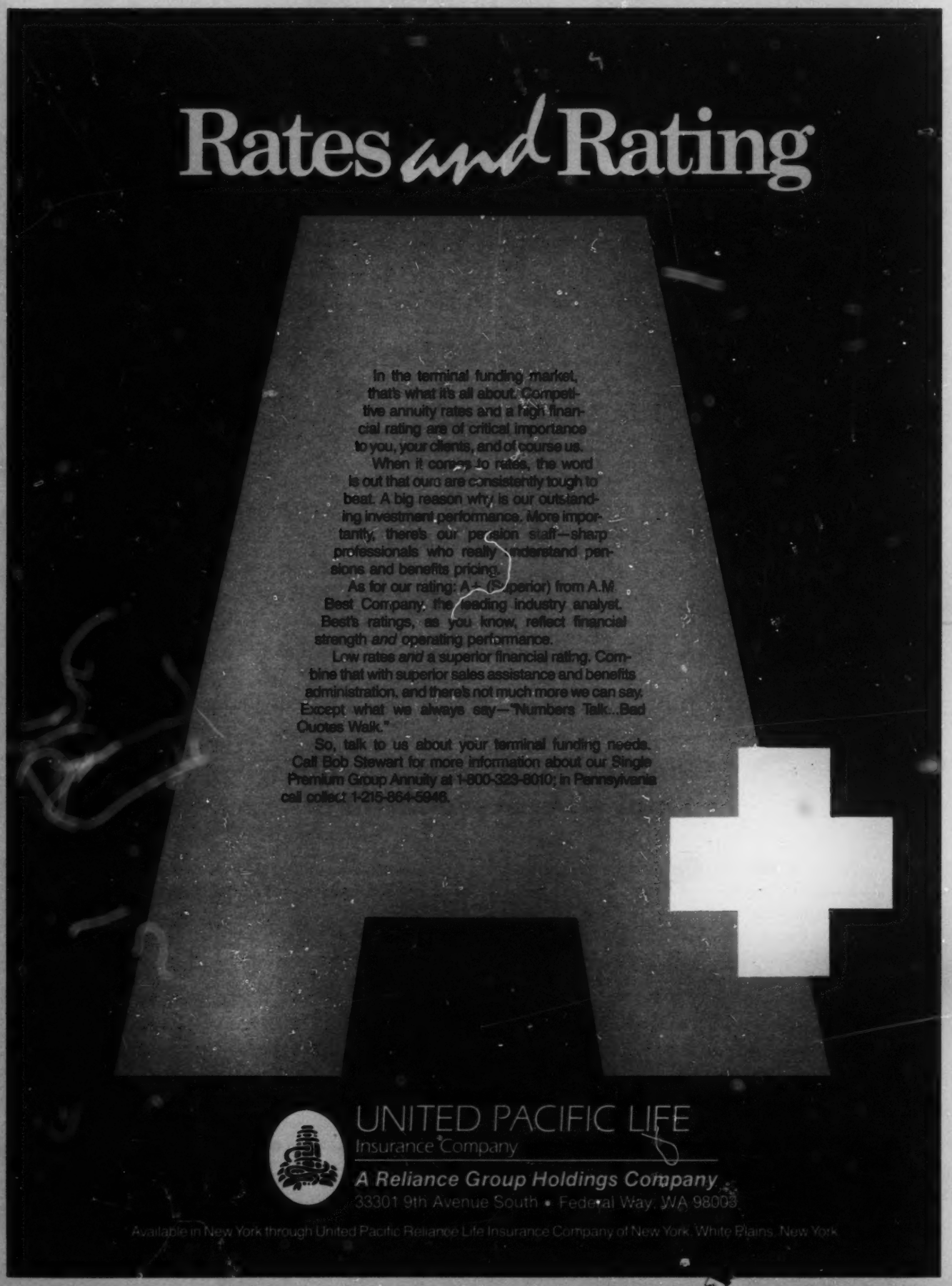
Bond funds were high fliers for the year. PCM's $200 million foreign bond fund returned 22.85% followed by First Chicago Investment Advisor's $270 million International Non-Dollar Fixed Income fund with 22.73% and PCM's Global Bond fund with 22.71%.

WorldInvest triumphed over three years returning a compound annualized 38.31%. PCM's global fund rose 36.92% followed by its foreign bond fund with 36.5%.

PCM's global fund topped the five-year bond charts with an annualized 24.61% vs. 22.25% for its foreign fund and First Chicago's 21.79% international bond return.

WorldInvest invests 40% in yen cash — not bonds — because the Japanese yield curve is flat, the Bank of Japan is reluctant to cut interest rates and economic growth is strong, said Philip Wolstencroft, investment manager. It also has 40% in deutsche mark bonds and 20% in Canadian bonds, greatly differing from the Salomon Non-U.S. index's 15% in Germany 45% in Japan and less than 10% in Canada.

First Chicago is holding medium to long maturities in Australia and Canada, markets that could benefit if the dollar rises. "We think the dollar is at the end of its cyclical decline," said Richard Carr, managing director. In global portfolios, the firm, which rarely uses derivatives, is hedging 25% from deutsche mark and sterling into U.S. dollars. ■



# Stock sales outpace buys

NEW YORK — Institutional investors were average net sellers of 800,000 shares of stock daily on the New York Stock Exchange in the first quarter, according to the Securities Industry Association.

In the same period in 1987, institutions fueled the stock market's rally with net purchases of 5.9 million shares a day on the NYSE, according to association officials.

Daily average volume on the NYSE in the first quarter was 358.2 million shares, down 3.3% from the daily average figure of 370.4 million shares a year ago. However, if corporate buyback and dividend recapture activities were excluded, the daily average volume would have been barely more than 300 million shares, or 17% less than a year earlier.

Retail activity accounted for about 24% of NYSE first-quarter volume, compared with 26.9% in the same period last year.

Volume on the American Stock Exchange declined 28.7% in the quarter, to a daily average 21.6 million shares from 30.3 million in 1987's first quarter. Institutional investors were net sellers of 300,000 shares daily, about the same as a year earlier.

In the over-the-counter market, daily average volume fell 16.1%, to 257.6 million shares from 307.1 million in 1987. Institutions were net buyers of 1.3 million shares of OTC stocks on a daily average basis, down from 2.1 million a year ago. ■

# International firms defensive

## Cash holdings doubled

By Marlene Givant

International equity managers more than doubled their tiny cash exposure in the first quarter while slightly increasing holdings in Japan and reducing those in the United Kingdom, according to the geographic asset allocation of the median non-U.S. equity portfolio of InterSec Research Corp., Stamford, Conn.

The portfolio's cash rose to 4.1% as of March 31 from 1.8% as of Dec. 31. That mirrors cash increases by domestic equity managers during the first quarter, according to INDATA investment analysis service, Southport, Conn. (*Pensions & Investment Age*, May 2).

Managers increased Japanese holdings to 39.9% from 35.8%, although the market itself rose to 64.4% of the Morgan Stanley Capital International Europe Australia Far East index vs. 61.4% at the end of December.

The portfolio's U.K. portion was reduced to 16.2% from 18.9%, although that market's performance alone sent it down almost 11% as a percentage of the EAFE to 13% from 14.4%.

Managers interviewed by *Pensions & Investment Age*, while not raising as much cash as the InterSec portfolio, were more defensive during the quarter. Some of the defensiveness stemmed from concerns over the U.S. market.

Believing foreign markets are vulnerable to a U.S. market shock, Ivory & Sime International Ltd., Edinburgh, invested 19% to 20% in gilts (U.K. government bonds) as of March 31. The firm, which invests $150 million internationally for U.S. tax-exempt clients, is balancing that defensive asset allocation with aggressive stock selection, avoiding the institutional favorites in each market.

Capital Guardian Trust Co., Los Angeles, which invests $2.8 billion internationally for U.S. tax-exempt clients, has maintained about 13% in cash since the fourth quarter of last year.

But IDS International Inc., London, sold its bonds and reduced cash to the 5% to 10% range from 5% to 15% because it believes stocks should outperform cash and bonds as the world economy is dominated by fears of inflation or recession.

Many managers are marveling at Japan's economic strength and stock market resiliency.

"We regard it as indisputable that the best economic fundamentals in the world can be found in Japan," noted an IDS International report.

Yet the economic engine is unlikely to overheat, the report noted. "The indications are that Japanese growth is moderating from its somewhat excessive burst of speed." The firm had between 54% and 60% in Japan at the end of the first quarter vs. 30% to 35% as of Dec. 31.

In addition, IDS reduced its target U.K. exposure to 10% to 12% from 12% to 16% in its effort to underweight hard-currency mature industrial markets in favor of Japan and other countries dependent on world trade.

In the first quarter, Martin Currie Inc., Edinburgh, which invests $249 million internationally for U.S. tax-exempt clients, increased Japan to 48% from 42% by reducing cash. Its target in Japan is 52%.

"It's one area of the world where we see continued economic growth to 1989 almost regardless of what happens in the rest of the world," said W.M.C. Kennedy, president, citing the nation's improved infrastructure and increased capital investment.

But some U.S.-based managers are avoiding Japan because of its high price-earnings ratios. To compensate for its minuscule 4% exposure to Japan, Grantham, Mayo, Van Otterloo International, Boston, which runs $2 billion for U.S. tax-exempt clients, is slowly increasing its exposure to the United Kingdom at the expense of Spain because the U.K. market has progressed so strongly.

"If you take Japan out, the U.K.'s neutral weight becomes 38% in EAFE," said Eyk Van Otterloo, partner. He added the United Kingdom, which should reach 35% in the portfolio, is cheaper than the index as a whole. As of the end of the first quarter, the firm had 32.5% of its holdings there. ■

**Geographic asset allocation of non-U.S. portfolios**

| Country/region | InterSec median portfolio 1st qtr. | InterSec median portfolio 4th qtr. | EAFE 1st qtr. | EAFE 4th qtr. |
|---|---|---|---|---|
| Japan | 39.9 | 35.8 | 64.4 | 61.4 |
| Other Pacific Basin | 7.4 | 7.1 | 4 | 4 |
| United Kingdom | 16.2 | 18.9 | 13 | 14.4 |
| Continental Europe | 24.8 | 26.8 | 18.6 | 20.2 |
| Other | 2.7 | 2.4 | 0 | NA |
| U.S. cash | 4.1 | 1.8 | 0 | 0 |

Source: InterSec Research Corp., Stamford, Conn.

# Going to cash

*Continued from page 1*
tween April 17 and May 12.

Some managers moved away from stocks much earlier.

J.H. Ayres & Co. Inc., a market timer in Colorado Springs, Colo., went to 100% cash from 100% equities Sept. 8 and is still there, said James H. Ayres, president. The move was due to the Fed's tightening of monetary policy, he said. The firm manages $1.8 billion.

Market timing and tactical asset allocation managers shift among asset classes because of predicting or reacting to changes in the value of each class. Many use a quantitative process. Most can shift allocations either by buying and selling the actual securities or using futures and options.

Among the shifts to cash from bonds:

- Consistent Asset Management Co., Wilmington, Del., which moved its $250 million under management to 100% cash from 100% bonds March 8.
- Harris Bretall Sullivan & Smith Inc., San Francisco, which placed half of its $200 million in fixed-income accounts in cash in February. It also has $200 million in equity-oriented accounts, which have been 85% in cash since last summer.
- Wilmington Trust Co., Wilmington, Del., changed the bond portions of its balanced accounts to cash in mid-March, said James V. Kelly, vice president. It makes moves based on a group of proprietary indicators keyed off trends in the market, he said.

The firm has $117 million in balanced accounts. Target allocations are 25% stocks, 75% bonds or cash for low-risk clients; 50% stocks, 50% bonds or cash for medium-risk clients; and 75% stocks, 25% bonds or cash for high-risk clients.

- R. Meeder & Associates Inc., Dublin, Ohio, reduced its bond accounts' exposure to nearly zero from 100% a month ago, said Robert Meeder, president. It effected the change primarily through the derivative markets. It came because of the firm's anticipation that interest rates would continue rising, he said.

The firm has between $40 million and $50 million in bond accounts. Its equity accounts, between $450 million and $500 million, have been half in stocks and half in cash since the beginning of the year.

- Schield moved its $2 million in bond accounts into cash in late March.
- Davis, Weaver & Mendel moved its fixed-income allocation, between $15 million and $20 million, to cash from long-term Treasury securities in late March.

There also were some earlier moves out of the bond market. Hoisington Investment Management Co., Houston, went to 100% cash from 100% bonds in December and remains there. It has $750 million under management.

On the stock side, Bruce Poliquin, Avatar's vice president and principal, said Avatar began reducing the exposure in late March and continued throughout April. The other 45% of Avatar's $1.5 billion under management is in cash.

"April and May were somewhat unusual," said Steven Lauer, manager-options and futures group. Bankers Trust, a tactical asset allocator, effects changes only by overlaying futures on a portfolio.

"It's not unusual for us to be totally out of the market two to four times a year," noted Marsh Douthat, executive vice president of Davis, Weaver & Mendel.

Bankers Trust, on the other hand, had made only minor shifts earlier in the year, but in April and May it was reacting to the changes in interest rates, Mr. Lauer said. The most recent move also was due to the Fed's tightening of credit, he said.

In Schield's case, stock prices had so deteriorated that further deterioration appeared likely, said Marshall Schield, president and chief investment officer. The firm looks at stock prices on an absolute basis and also considers them in relation to their 15-week moving averages.

As measures of the stock market, Schield Management does not use the Standard & Poor's 500 stock index or the Dow Jones industrial average, but broader universes such as the Value Line index of roughly 1,700 stocks and its own universe of 4,000 issues.

**James H. Ayres says his investment management firm has held cash since Sept. 8.**

In bonds, Schield Management looks at prices, as well as interest rate trends and monetary policy.

The firm's accounts are either 100% in their respective markets or 100% in cash. It had gone into equities Dec. 23, after having gotten out of the market Sept. 22. It had been in the bond market since Oct. 21.

Avatar bases its tactical asset allocation decisions on the amount of liquidity in the economy and in the hands of investors, Mr. Poliquin said. If there is excess cash not being absorbed by the industrial sector, it often ends up in stocks.

"Excess liquidity means low risk, so we raise equity exposure in those environments," he said. By the same token, it decreases equity exposure in climates of less liquidity. Avatar measures liquidity by such factors as interest rate trends, Federal Reserve policy and foreign participation in U.S. markets.

Bankers Trust's Mr. Lauer said in the near future, bonds have a higher probability of performing well.

The outlook would be more positive for stocks if the Fed loosens the money supply, he said.

Not all asset allocators are down on stocks, however. Renaissance Investment Management Inc., Cincinnati, had been 100% in bonds last summer and went to a 50-50 stock/bond allocation early in November, and might increase stocks further, said Mike Schroer, director of research.

The firm has $1.2 billion under management.

The Boston Co., Boston, cut its tactical asset accounts' equity exposure to slightly more than 50%, from 70%, when the Dow hit 2200 seven weeks ago, but went back to about 60% stocks when the average came down into the 1900s two weeks ago, said Richard Crowell, senior vice president.

The remainder of the $2 billion in the accounts is in bonds; neither stocks nor bonds are overvalued now, so there's no reason to hold cash, Mr. Crowell said.

David Bostian, chief investment officer of Bostian Research Associates Inc., New York, said the many managers holding cash is positive for the stock and bond markets because the cash will be ready for use when these markets start to move.

Mr. Bostian sees no immediate threat of inflation or recession and looks for upward moves in both the stock and bond markets. His firm manages only equities, about $6 million, and has been fully invested since December. ■

*Also contributing to this story were staff writers Curtis Vosti, Carol Wiley and Fred Williams.*

# RCB split

*Continued from page 2*
other key employees. Mr. Beasley is a shareholder in Rogers, Casey & Barksdale; he will become a shareholder in the new Rogers Casey firm.

Messrs. Casey and Rogers were unavailable for comment.

Under the split, RCB International will get four Rogers Casey & Barksdale operations — RCB Trust Co., based in Stamford; the Diversified Fund of Canada, Toronto; the Diversified Fund of the U.K., London; and Stamford Associates Ltd., Guernsey, Channel Islands.

Barksdale

The four operations offer commingled funds through outside investment advisers hired by the company. In the United Kingdom, Mr. Barksdale said RCB International has begun offering separate account investment programs, also run by outside advisers. The Guernsey operation serves the four wealthy individual clients, through commingled investment funds.

As the four operations were established and grew, Mr. Barksdale eventually devoted all of his time to them.

The Canada fund, the first of the four, was formed in 1979. RCB Trust, set up in 1985, markets to small funds; its commingled funds always were separate from the investment programs Rogers Casey is retaining, Mr. Beasley noted.

The RCB International funds invest globally in stocks and bonds, as well as holding U.S. and Canadian real estate, Mr. Barksdale said.

The Rogers Casey funds invest only in U.S. stocks and fixed income, according to Mr. Beasley.

According to Mr. Barksdale, who will be president and chief operation officer of RCB International, the two entities have been operating as separate accounting units since Aug. 1 in preparation for the legal split.

Some pension fund clients said they have been aware of the impending change since last year; they saw no impact on the services.

Mr. Barksdale said the reorganization agreement precludes the entities from working in the other's fields for some time.

He said the reorganization was taking some time to complete, in part because "it's an enormously complicated process to go through a tax-free exchange."

The reorganization is a division of assets; no cash will change hands. He added the October market crash postponed the legal work further as the principals were off serving clients.

"There are no problems or obstacles," Mr. Barksdale added. "But if everyone is off serving clients, no one is there to push the lawyers along."

Mr. Beasley said legal work on the reorganization should be complete in two or three months.

# ESOP refinancing holds guaranty

By Brad Rudin

NASHVILLE, Tenn. — HealthTrust Inc., created last year in an employee-sponsored leveraged buy-out, will refinance some of its acquisition debt in an innovative offering, part of which will be guaranteed by the company's former owner, Hospital Corp. of America.

The refinancing is an important step for HealthTrust because it allows the still-struggling company to defer some cash debt service payments for four years.

"It makes sense for the company because it gives them a lot of breathing room in the short term," said Margery E. Obrentz, health-care analyst in the high-yield research group at Kidder, Peabody & Co. Inc., New York.

The principal amount $745 million refinancing package consists of a mix of zero-coupon and current-pay bonds. The principal amount of the guaranteed zero-coupon and current-pay bonds is $240 million, while the non-guaranteed bonds total $505 million. The offering provides net proceeds of $554 million.

The $365 million redemption amount of non-guaranteed zero-coupon senior subordinated debentures, due Dec. 1, 1999, was priced to yield 16.5% until Dec. 1, 1991. The issue thereafter will pay interest semiannually at a rate of 16.5% to maturity. The non-guaranteed $140 million tranche of senior subordinated debentures, due Dec. 1, 1999, was priced at par to yield 15.25%.

The $110 million redemption amount of zero-coupon guaranteed subordinated debentures, due Dec. 1, 2002, were priced to yield 11.6% until Dec. 1, 1991. Thereafter, the debentures will pay a semiannual rate of interest of 11.6% until maturity. The $130 million of guaranteed subordinated debentures due Dec. 1, 2002, were priced at par to yield 11.25%.

Drexel Burnham Lambert Inc., New York, is the sole manager of the offering, which was priced May 25.

HCA last year sold 104 hospitals and other assets in a $2.1 billion leveraged buy-out in which the cash portion was mostly financed by $810 million lent to the HealthTrust employee stock ownership plan. The ESOP, the largest in the United States, owns 90% of HealthTrust's common stock on an undiluted basis.

The shrinkage of HCA is similar to the restructuring of American Medical International Inc., Beverly Hills, Calif., which announced in May it plans to sell 37 hospitals to employees for $910 million in cash and securities.

Contributions made to the HCA defined contribution plan in behalf of the 23,000 employees who now work for HealthTrust might soon be transferred to HealthTrust, said Charles R. Gaston, vice president for administration. Preliminary indications from the Department of Labor suggest the departure of the 23,000 employees will be treated as a partial plan termination, he said, adding tentative estimates put the amount to be transferred at $200 million.

The transferred contributions will fund a defined contribution plan at HealthTrust that will be separate from the ESOP, Mr. Gaston said.

HealthTrust also stands to gain from the public offerings, which include zero-coupon issues that relieve HealthTrust from the burden of making cash interest payments until June 1, 1992.

Respite from cash interest payments will be welcome news for the company, which experienced a $65 million fixed-charge coverage deficiency for the six months ended Feb. 29, 1988. If earnings were adjusted to eliminate certain non-cash charges, HealthTrust would have reported income of $78 million in excess of fixed charges.

The offerings also buy time for HealthTrust because the covenants require dividends on previously issued preferred stock be paid in kind before Dec. 31, 1992.

Cash payment of interest and dividends will kick in when other debt service obligations "are expected to be substantially reduced from current levels," according to the preliminary prospectus filed last month.

Still, the ability of HealthTrust to service its debt remains in doubt.

"There's a certain amount of cash flow stability at HealthTrust by virtue of the essentiality of hospital services, but with half the beds unoccupied and margins being squeezed by costs that can't be passed through, the company has its work cut out," said Michael Kaplan, a health-care analyst at Standard & Poor's Corp., New York.

HealthTrust's future should be analyzed in the context of the prospects for the health-care industry, said Roger Gordon, a high-yield bond analyst at Donaldson, Lufkin & Jenrette Securities Corp.

"While some people perceive that hospital utilization trends have turned in the early part of 1988, my own feeling is that it might be more of a temporary phenomenon than a real indicator of a strong industry turnaround," he said.

Standard & Poor's gave a BBB+ rating to the guaranteed debt and a CCC+ rating to the securities not guaranteed by HCA. Moody's assigned a Baa1 rating to the guaranteed debt and a B3 rating to the other tranche.

HCA backing boosted the credit rating of the $110 million issue of zero-coupon guaranteed subordinated debentures due 2002 and the $130 million issue of guaranteed subordinated debentures due 2002. Proceeds from this offering, together with the concurrent offering, will refinance $240 million of privately placed increasing-rate debentures due 2002 that bore an interest rate of 8.875% April 1, 1988. The base interest rate, 200 basis points over the London interbank offered rate, increases its spread over LIBOR by 50 basis points each quarter after issuance.

Because the guaranteed debentures themselves have an increasing-rate structure, HealthTrust has an incentive to refinance before maturity. If cash flow levels reach specified amounts starting in 1992, the interest rates on the guaranteed debentures increase to a rate 100 basis points higher than the coupon rate or the interest rate paid on comparable securities, whichever is greater. The revised interest rate will be increased by an additional 100 basis points every 90 days thereafter.

In addition to guaranteeing the debentures, HCA also provides credit support by agreeing to purchase up to $40 million of preferred stock if certain cash flow goals are not achieved before Aug. 31, 1990.

Proceeds from the offerings will be used to refinance $303 million of privately placed increasing-rate senior subordinated notes due 1999. Those notes bore 12.375% interest rate April 1, 1988. The base interest rate, 550 basis points over LIBOR, increases its spread over LIBOR by 50 basis points each quarter after issuance. ■

## Suspect enters not guilty plea

CHICAGO — Morton Scherl, former chairman of DuPage Boiler Works in Naperville, Ill., has pleaded not guilty to fraud charges that arose from the alleged diversion of the company's profit-sharing funds to his own use.

The U.S. attorney's office in Chicago brought charges against Mr. Scherl and two associates last year (*Pensions & Investment Age*, June 1). Mr. Scherl, who had been missing since Oct. 9, 1986, was arrested by FBI agents April 26 in Baltimore, where he had assumed a new name.

The indictment issued last year alleges Mr. Scherl diverted DuPage Boiler Works' profit-sharing assets to his own use. The company had $741,000 in its profit-sharing plan, of which $681,000 is alleged to have been diverted by Mr. Scherl; the remainder was a penalty for withdrawal from an annuity contract in which the plan was invested.

DuPage Boiler Works went out of business in 1986, leaving 50 workers without jobs or retirement funds. Mr. Scherl is charged with several counts of fraud, including violation of the Employee Retirement Income Security Act.

Two associates also were charged with fraud and diversion of profit-sharing assets. Jack Eberwein, DuPage Boiler Works' former president, pleaded guilty to the charges and cooperated in the prosecution of William B. Goodstein, former secretary of the company. Mr. Goodstein was convicted in December and sentenced in February to three years in a federal prison in California. Mr. Eberwein is in a work-release program in Ohio.

## Moving up, on

*Continued from page 2*

investment analyst of the company's pension fund, reporting to Jack Miller, who recently joined the Philip Morris Cos. Inc., New York.

"My husband was going to grad school in Muncie and the job was open," she said. "I enjoy pensions."

Mr. Miller has been replaced by Fred W. Ruebeck, former controller of the pharmaceutical division at Eli Lilly.

Mr. Adams had been with PacTel for more than four years, overseeing the $8.5 billion fund's international and fixed-income investments.

His resignation follows that of Jeffrey Winter and Daniel Braswell, who formed Quantologic, a tactical asset allocation firm.

Since then, Andy Fagan has been named a portfolio manager at PacTel and Douglas Taylor has been named executive director-investment management.

Parametric Portfolio Associates, Seattle, a quantitative domestic and international equity manager, runs $450 million, mostly for U.S. tax-exempt clients.

At Brunswick, Mr. Dolsen replaces Beverly Madore, who left for a job unrelated to investment management. His replacement at Blue Cross has not been named.

Mr. Dolsen said his new job at Brunswick will allow him to concentrate on pension asset management, while at Blue Cross he had several additional responsibilities. Each company has about $600 million in pension assets.

In New York, Mr. Ballard said he isn't quite ready to fully end his 40-year real estate career.

"I ain't about to retire and I don't think I ever will," Mr. Ballard said. "It's just a little change in lifestyle. I'm happy as heck. I'm getting close to 60 years old and I'd like to put something back to this industry that's been so good to me."

In addition to working part time at Goldman, Sachs, he said he is talking to some universities about teaching.

Mr. Ballard, who owns several farms, also plans to take a more active role in the agricultural business. ■

## Surplus

*Continued from page 3*

eral taxes on reversions, declining interest rates raising the present value of liabilities, and October's upheaval in the stock markets, sending reminders of investment risks, according to pension industry executives.

Among other reasons, they cite fears of balance sheet liabilities under the Financial Accounting Standards Board Statement 87 if the accrued present value of benefits is underfunded.

Last year, 169 plans were terminated, resulting in $1.43 billion in reversions, according to the PBGC. That was the lowest level since 1983, when there were 164 plans terminated with $1.6 billion in reversions.

Since 1980, there have been 1,634 terminations, with reversions totaling $17.87 billion, according to the PBGC. With additional reports from companies that had major terminations, the reversions rise to a total of $18.08 billion.

Using the revised figures, 25 companies have received 43% of all the reversions; Exxon alone accounts for 9%.

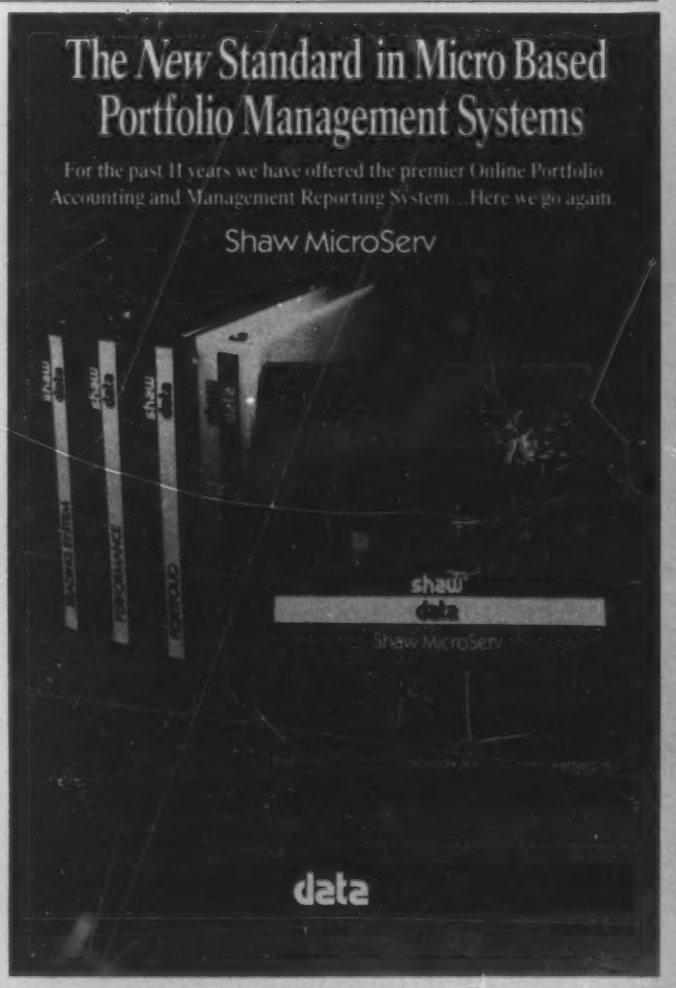
EBRI's Mr. Piacentini points out that for all the concern about reversions, they have involved only a small share of the 240,000 corporate defined benefit plans.

David M. Walker, assistant secretary of labor, said the Great Atlantic & Pacific Tea Co.'s termination in 1981 first heightened the awareness of the value of surplus pension assets.

Mr. Walker, who was acting executive director of the PBGC until 1985, also cited AM International Inc., Chicago, as another early astute user of terminations. It terminated both overfunded and underfunded plans, while it was in bankruptcy proceedings between 1982 and 1984.

AM International recaptured the surplus from one plan, but dumped the deficit from the other onto the PBGC. Jack Ambraister, senior vice president, secretary and general counsel of AM, said the company later made a settlement with the PBGC over the deficit plan. He couldn't recall the figures.

But Mr. Ambraister noted the reversion of the surplus "was very, very significant" in the company's successful reorganization. "Without the reversion, we would have had to give more equity to creditors and less to shareholders." ■



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Investment Age

# Texaco fight intensifies

Chairman Alfred DeCrane, noting he has been in charge for less than two years, vows a special effort to gain the confidence of Texaco's investors.

By Marcia Parker

Texaco Inc. management and corporate raider Carl Icahn have stepped up 11th-hour appeals to institutional investors, the pivotal players in deciding the bitter, too-close-to-call proxy battle for control of the company.

Interviews with more than 24 of Texaco's largest institutional investors uncovered eight — representing several million shares of Texaco — that will support management at Friday's annual meeting. But only the California Public Employees' Retirement System, which owns about 763,000 shares, agreed to publicly reveal its position. Many others were undecided or would not reveal their decisions.

At least six others said they support Mr. Icahn. Several said they would vote for him not because they prefer his offer over Texaco's restructuring, but because they are angry with Texaco's board for not allowing shareholders to vote on Mr. Icahn's offer.

One large money manager with significant Texaco holdings said his firm is reviewing a vote for Texaco management that the firm cast prior to Mr. Icahn's $60 per share offer. He said a final decision hadn't been made, but the firm is "leaning toward supporting Mr. Icahn."

Several money managers and pension fund executives said they felt almost under siege as they fielded a flurry of calls on behalf of Texaco and Mr. Icahn.

"It's my impression there's a high degree of pressure being brought to bear on this Texaco situation," one money manager said. "Texaco management is pulling out all the stops to get their friends to vote for them."

*Pensions & Investment Age* interviewed Texaco Chairman Alfred DeCrane and Mr. Icahn last week. Both men, confident of victory and convinced their respective plans for Texaco are in the best interests of stockholders, lobbied hard for institutional support.

Some investors, meanwhile, have extracted promises from management in return for their support, an unusual move that represents a significant expansion of the growing activism of many institutional investors.

After at least two face-to-face meetings with Texaco management in recent weeks, Dale Hanson, executive director of the California fund, secured in writing a "personal commitment" from Texaco Chief Executive Officer James Kinnear to discuss procedures for choosing the board of directors in time for possible implementation by Texaco's 1989 meeting. Together they would try to develop a mechanism to allow shareholders to nominate their own candidates to a minority of board seats.

If that proposal is worked out, it would be the first time shareholders have had that opportunity. It could go a long way toward extending their influence in corporate affairs.

In another first, an advisory committee of large, long-term Texaco institutional investors is being set up by the California pension fund "to provide Texaco with a responsible, stable

*Continued on page 37*

# DOL requests voting records

WASHINGTON — Carrying through on its vow to step up monitoring of proxy voting, the Department of Labor last week sent out letters to money managers seeking voting records in dozens of companies — including Gillette Co. — with significant proxy disputes in 1988.

Charles Lerner, director of enforcement, confirmed the letters had gone out and the department requested results on a number of proxy votes. He declined to elaborate, citing the department's long-standing policy of not commenting on pending investigations.

A number of money managers and pension fund executives — none of whom wished to be identified — said they had received the letter and planned to provide the requested information. The department indicated in the letter it would use its subpoena power if investors did not comply voluntarily.

Sources in the investment and legal community said the Labor Department initially has targeted institutional investment managers in five regions — New York, Boston, Chicago, Los Angeles and San Francisco — that held large blocks of stock on behalf of tax-exempt funds in specific companies that had significant proxy disputes.

A complete list of the targeted proxy contests could not be obtained by press time, and it appears the list of com-

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# The thrill of victory

## Tallies reveal two 'firsts'

By Marcia Parker

Activist institutional investors are savoring victory in 1988, having scored more significant triumphs on shareholder resolutions dealing with corporate governance issues than ever before.

First of a two-part series

The average shareholder vote for anti-poison pill proposals at 18 companies was 38.2% this year, nearly nine percentage points higher than last year's totals, according to the Investor Responsibility Research Center Inc., Washington.

The votes supporting rescission of poison pills or putting them to a shareholder vote ranged from 26.3% to 61.1%, excluding abstentions. And shareholders at Sante Fe Southern Pacific Corp. overwhelmingly approved a proposal to eliminate the company's poison pill, the only anti-poison pill resolution ever passed.

Five anti-greenmail proposals averaged support of 28.4% this year, compared with a 12.9% average for two proposals last year. One proposal — at Gillette Co. — was approved, the first such proposal to pass.

Secret-ballot proposals fared well considering this was the first year they were a major issue and, therefore, some institutions had not developed voting policies. Nine confidential-voting proposals averaged 9.9% of the shares voted. Three companies agreed to voluntarily implement confidential proxy voting in response to shareholder proposals.

Five resolutions calling for shareholder access to the proxy statement averaged support of 8.78%.

"The message of all this seems to be that shareholders

*Continued on page 37*

The California Teachers' fund withdrew an anti-greenmail plan for Dayton-Hudson because of existing provisions in state law.

## LATE NEWS

### PacTel picks pension executive

SAN FRANCISCO — Richard P. McGahan has been named director of pensions at Pacific Telesis Group, San Francisco, replacing Jeffrey Winter, who was promoted to executive director-investment management, in February.

Mr. McGahan will handle all investment policy of the $8.5 billion pension fund. Prior to joining PacTel, Mr. McGahan was vice president-client service at Fred Alger Asset Management Inc., San Francisco. Until mid-1986, he was manager-pension investments at Monsanto Co., St. Louis.

He said he is returning to the pension sponsor side of the industry "because it is the area I have the most interest in. PacTel is a great company."

### Change urged in New York law

NEW YORK — New York state should adopt a prudent-investor rule and drop its legal list requirement to allow greater diversification, according to the state's Permanent Commission on Public Employee Pension and Retirement Systems.

Alternatively, the legal list should be liberalized to expand the state's "basket clause" to 25% of assets from 7.5%, the commission wrote in a report submitted to the Legislature last month. That clause permits investment in assets not on the list, such as foreign securities, leveraged buy-outs, venture capital, mortgages and real estate.

The state investment law affects eight retirement systems of the state and New York City, with combined assets of $85 billion.

A study prepared by Buck Consultants Inc., New York, submitted with the commission's recommendations, said the systems soon will reach the 7.5% limit.

### Pennsylvania ups foreign bonds

HARRISBURG, Pa. — The $8 billion Pennsylvania State Employes' Retirement System has increased the amount it will allow a manager to invest in international bonds, said Kenneth G. Mertz II, chief investment officer.

Miller, Anderson & Sherrerd, Bala Cynwyd, Pa., which manages $1 billion in fixed-income assets for the fund, now can put up to 20% in foreign bonds, up from 10%. The program has been in effect since 1985.

The fund is very pleased with "the greater opportunities and diversification it gives us," Mr. Mertz said.

The system is studying whether to go into international equities, he said.

### Yale taps international manager

NEW HAVEN, Conn. — The Yale University endowment has hired Grantham, Mayo, Van Otterloo & Co., Boston, to manage $100 million in international equities, and has appointed Morgan Stanley Trust Co., New York, as a global custodian.

The international manager will weight countries in the portfolio according to relative gross domestic product, instead of market capitalization, which is traditionally used to weight international index funds, sources said.

To save on transaction costs, Yale acquired a slightly smaller portfolio that Grantham, Mayo, Van Otterloo had managed for General Electric Co., which had brought its money in-house.

The Yale fund totals $1.74 billion, according to the 1988 Money Market Directory.

### State Street hired to run GICs

MCKEESPORT, Pa. — G.C. Murphy Co. hired State Street Bank and Trust Co., Boston, to manage a guaranteed investment contract portfolio for its $18 million 401(k) plan, said Rich Rose, director of compensation and benefits.

Mr. Rose said the separately managed GIC account will total about $7 million initially as existing contracts expire and are rolled into the account.

He said all GICs in the salary reduction program will be managed by State Street because of consolidation of the plans of G.C. Murphy and Ames Department Stores Inc., Rocky Hill, Conn. Ames acquired Murphy in 1985.

### Moore gets new duties at Aetna

HARTFORD, Conn. — T. Jerald Moore, president of Aetna Capital Management Co., has been named vice president-Eastern region, insurance marketing and administration for Aetna Life & Casualty Corp.

The area covers traditional insurance products, alternative health services, client servicing, and new product marketing and pricing.

Mr. Moore, who will start his new duties July 5, will retain his current title of vice president-employee benefits division.

His successor as head of the pension and financial service marketing department has not been named.

## DEPARTMENTS


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Vol. 16, No. 13 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1988.

# Futures recovering from crash injuries

By Trudy Ring

Optimism is creeping back into the derivatives markets, as volume on exchanges worldwide slowly rises and industry leaders ease their post-crash criticisms.

Granted, volume in the Standard & Poor's 500 stock index futures, the most popular contract for institutional use, still is down more than 40% from year-ago levels. But exchange officials and both proponents and opponents of the strategies believe the instruments will make a comeback.

"Statistically, we're about where we were in 1986," exchange spokesman Andrew Yemma said. "If you take the point of view that 1987 was an abnormal year, we're basically pretty well positioned for further growth in the product."

Alger B. Chapman, chairman of the Chicago Board Options Exchange, said activity in options and futures is down about the same amount as stock volume, once volume attributed to dividend plays is deducted from stock figures.

"I haven't found that the volume has been poor enough to hinder any of the strategies we use," said Jeffrey Geller, vice president of BEA Associates Inc., New York. BEA, with $7.2 billion in tax-exempt assets under management, uses futures heavily.

Mr. Geller added he believes stocks and derivatives are one market. "The futures volume is really just echoing the lack of liquidity in the equity market today," he said. "I don't believe the tail can ever wag the dog."

"If you're asking if the futures markets will persist and grow,

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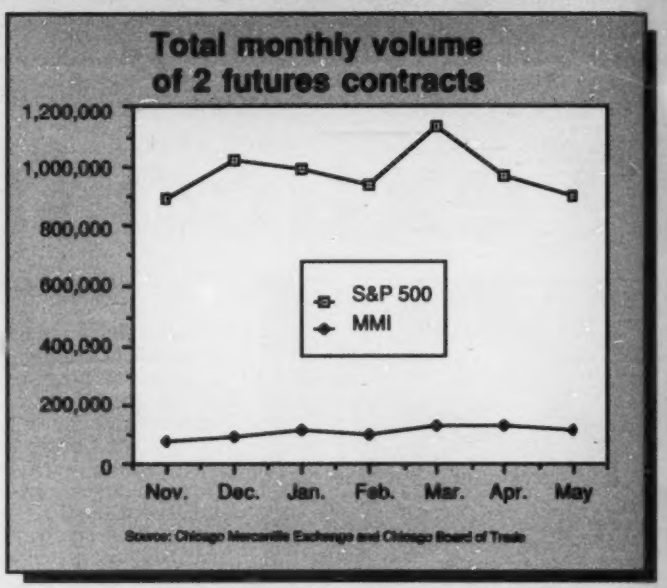


# Taking a worldly view

## $100 million fund starts global allocation strategy

By Marlene Givant

WALTHAM, Mass. — The $100 million Dennison Manufacturing Co. defined benefit retirement plan is embarking on a global tactical asset allocation strategy, incorporating hedging with futures, options and currencies.

Global tactical asset allocation is rare among pension funds, and almost non-existent among funds the size of Dennison's.

The $40 billion California Public Employees' Retirement System, Sacramento, made a similar decision late last year; that mammoth fund, however, initially will invest only 1% to 2% overseas. In contrast, Dennison's new strategy will put the fund 20% in global investments, a significant amount for any fund, especially one with $100 million.

Dennison is restructuring its portfolio and will base the fund's asset mix on the asset allocation strategies of two managers it just hired.

"We feel that (asset allocation) expertise should be left with the experts . . . That's why we're giving managers latitude," said Karen Edlund, pension and employee stock ownership plan manager of Dennison. The company manufactures paper, stationery products and industrial products such as fasteners and provides data processing and marking systems for retailers.

"When we talked to (international management) candidates we listened to their models and strategies, and that convinced us they could enhance returns when given more flexibility."

Both of the asset allocators the fund hired — Mellon Capital Management, San Francisco, and WorldInvest Ltd., London — may hedge, and they have no asset class targets to meet.

"The desire to further diversify the fund into international and extend the duration of the pension portfolio to better match liabilities" prompted the restructuring, Ms. Edlund said. Bond

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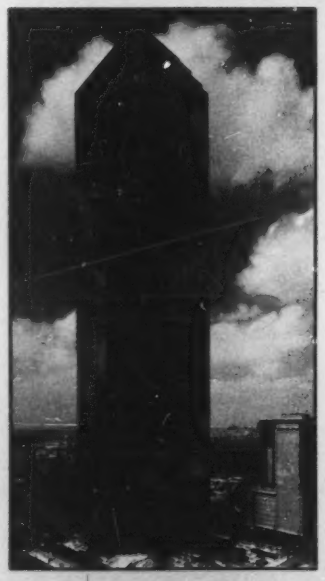

First RepublicBank is the latest bank to leave the benefit record-keeping services area.

# Texas bank cuts record keeping

By Fred Williams

DALLAS — The decision by First RepublicBank to drop its employee benefit record-keeping program was made to save money and save face, and was not directly related to problems stemming from the bank's troubled loan portfolio, according to bank and industry officials.

First RepublicBank, which announced its decision in a letter to clients last month, is the most recent of several large banks to leave the record-keeping business.

At least eight major banks have quit the business in the past two years, including Security Pacific National Bank, Continental Illinois National Bank & Trust Co. and Manufacturers Hanover Trust. Experts say banks are trying to reduce costs and return to core trust services, and they lack a commitment to the complex area.

Lou Valentino, consultant and manager of the defined contribution practice for the Wyatt Co., New York, said the pull-out "is a function of how the organization perceives the business and whether they are committed. No one is interested in providing a loss-leader."

He said record keeping is expensive and complex: "In the record-keeping area there are hundreds of things to worry about, and numerable permutations of things that can go wrong. It is inherently complex."

Gail Kellogg, partner and practice leader for defined contribution plan administration at Hewitt Associates, Deerfield, Ill.,

*Continued on page 35*

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# Funds, advisers assail SEC plan

By Brad Rudin

Public pension plans and the sponsors of closed-end real estate funds have blasted a proposed change in Securities and Exchange Commission rules that would prevent many public funds from investing in the real estate funds and other private placements.

The proposed rule would disqualify state and local government pension plans from accredited investor status unless plan officials delegate investment responsibility for private placements to a bank, savings and loan, insurance company or registered investment adviser.

Currently, such responsibility may be retained by fund officials without losing accredited investor status.

A public pension plan also would be disqualified unless it established fiduciary principles that were the same as, or similar to, those contained in the Employee Retirement Income Security Act of 1974.

Issuers are allowed to sell private placements without going through complicated registration procedures only to qualified investors.

Several critics said the SEC is trying to get around Congress' 14-year-old decision to exclude public funds from ERISA.

They also said the proposal would limit arbitrarily the investment options held by public funds.

"Why should we be restricted in not being able to buy things that are advantageous to the pension fund?" asked Bobby J. McKee, general manager of the Kentucky Retirement Systems, Frankfort. "We're here to make money for our constituents."

Mr. McKee and other public fund officials voiced their criticism in comment letters to the SEC last month.

"This is an important investment for public pension funds," said Keith Johnson, acting general counsel of the State of Wisconsin Investment Board, Madison. "It's been an especially lucrative investment for us, and we don't want to be in a situation where the basis upon which we're qualified to make these investments under the securities laws is put into question."

Critical letters also came from officials of the Chicago Policemen's Annuity & Benefit Fund and the Los Angeles County Employees' Retirement Association.

The SEC proposed the new definition of an accredited investor in March; the comment period expired May 13.

It remains unclear when the commission will take action on the proposal.

If adopted, the rule would modify Regulation D, which provides safe-harbor exemptions from federal securities law disclosure requirements.

The proposed rule change also affects the sponsors of commingled closed-end real estate funds that depend in large measure on public pension funds.

For example, public funds invested about half of the capital for Heitman Advisory Corp.'s four closed-end real estate funds since 1984, said David Glickman, president of Chicago-based Heitman. Other managers have similar percentages of public fund money, he added. ■

## CORRECTIONS & CLARIFICATIONS

- **Oppenheimer Capital** was incorrectly identified in the May 23 money managers' profile issue.
- **Cullen Bank**, Houston, Texas, was omitted inadvertently from the May 16 PIPER equity five-year listings. The bank returned 18% for the period, putting it in the top decile.
- The names of **Dennis Brush** and **Michael J. Connelly**, managing directors at **Lepercq, de Neuflize & Co.**, New York, were transposed in a photo caption in the May 16 Financing section.

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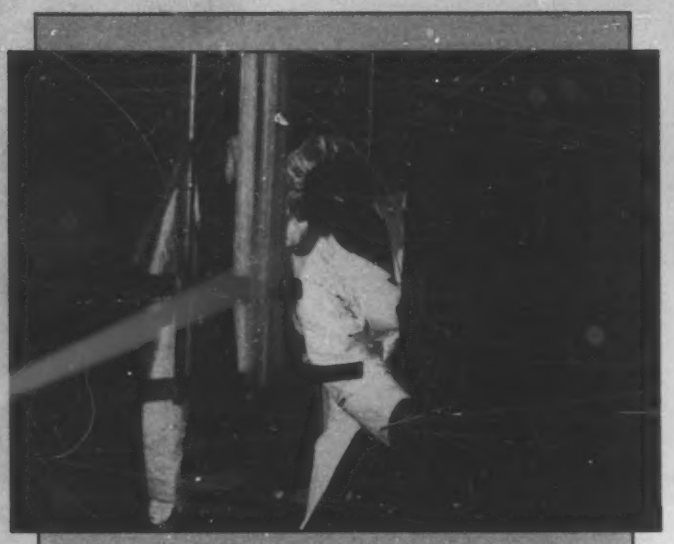
June 27, 1988

# Investment Age



Eagle-Picher Industries, manufacturer of industrial products, saves as much as 150 basis points annually through passive management.

## Passive funds lift returns for 3 corporations

By Barry B. Burr

Three corporate pension funds with all or most of their assets under passive management during the bull market plan to continue to index, even though the median active equity manager beat the Standard & Poor's 500 index for the 12 months ended March 31.

Polaroid Corp., Cambridge, Mass., has indexed the entire equity portion of its $576 million pension fund since 1981, while running all of its fixed income actively.

Eagle-Picher Industries Inc., Cincinnati, has had all of its $140 million fund — equities and fixed income — under passive management since 1981.

The $107 million pension fund of Turner Corp., New York, has indexed all its equities

*Continued on page 37*

## DOL to probe 23 on proxies

By Marcia Parker

Gillette Co., Allied-Signal Inc. and Texaco Inc. are targets of the Department of Labor's proxy monitoring "hit list."

*Pensions & Investment Age* also has learned the chairmen of Gillette and Allied-Signal made written appeals to fellow chief executives requesting they talk to their pension fund managers about voting proxies in support of those companies' managements.

The Labor Department earlier this month requested proxy voting records from fiduciaries of several companies as part of its stepped-up proxy monitoring program (*P&I Age*, June 13). At the time, only Gillette, which recently won a hard-fought proxy contest between management and The Coniston Group for company control, was known to be on the list of 23 names.

The Labor Department is seeking to ensure proxy voting practices are well-planned and well-documented, and no improper pressure is being applied to those who hold proxy voting authority.

According to a full list of target companies obtained since by *P&I Age*, the others are: Santa Fe Southern Pacific Corp.; USAir Group Inc.; Media General Inc.; Coleman Co. Inc.; International Paper Co.; Kerr-McGee Corp.; Martin Marietta Corp.; Pitney Bowes Inc.; United Technologies Corp.; Champion International Corp.; Upjohn Co.; Boise Cascade Corp.; Tenneco Inc.; Champion Spark Plug Co.; Honeywell Inc.; Lockheed Co.; Unocal Corp.; Amoco Corp.; Chevron Corp.; and Mobil Corp.

The Labor Department's target companies include some of the most hotly contested proxy battles of the 1988 season as well as others involving corporate campaigns to defeat shareholder-sponsored corporate governance resolutions.

The letters sent by Gillette and Allied-Signal executives are a twist on a letter-writing campaign launched during last year's proxy season. A controversy erupted when several chief executives wrote their counterparts asking them to use their influence with pension fund managers to support management's positions on shareholder resolutions, especially withdrawals of poison pills (*P&I Age*, April 6, 1987).

The 1987 letter-writing campaign is believed to be the catalyst of the Labor Department's 1988 proxy monitoring initiative, its widely circulated warning letter to Avon Corp. on proxy voting, and the guidelines for pension plan fiduciaries it issued this year.

Pension fund executives, money managers and institutional investors said they would be watching to see how the department views the latest letters and the aggressive campaigns launched this year to defeat raiders who waged proxy battles and corporate governance shareholder resolutions.

The Labor Department is not believed to view

*Continued on page 35*

## Social issues abate

### Resolutions find only limited support

By Trudy Ring

The 1988 proxy voting season was less than stellar for shareholder resolutions dealing with social issues, but sponsors still saw a few bright spots.

Average support for shareholder resolutions seeking corporate withdrawal from South Africa fell somewhat, but for the first time there was significant support for resolutions that called for ending non-equity ties, such as licensing agreements, in that nation.

A record number of companies faced resolutions on their operations in Northern Ireland, but support for such resolutions dropped at most companies where the issue had been raised previously. Support rose on average, however, in part because of one large vote.

In all, 87 resolutions on South Africa came to votes. Twenty asked companies only to withdraw their operations from that nation; 33 asked them to withdraw and sever other ties; 15 asked companies without direct investment to cut non-equity ties; and the remainder addressed such issues as endorsement of the Statement of Principles (formerly the Sullivan Principles) and sales to the South African government, police and military.

**10 largest vote-getters among South Africa withdrawal resolutions**

| Company | Shares voted in favor |
|---|---|
| Gillette [1] | 21.9% |
| Gillette [2] | 21.4 |
| Colgate-Palmolive | 17 |
| Goodyear | 16.1 |
| MCA | 15.6 |
| NCR | 15 |
| Baker Hughes | 14.8 |
| Tenneco | 14.5 |
| Squibb | 14.2 |
| Caterpillar | 14.2 |

[1] Withdrawal only
[2] Withdrawal and cut all other ties
Source: Investor Responsibility Research Center

South Africa withdrawal resolutions won support from 20% or more of the shares voted at only one company, Gillette Co., compared with five companies in 1987. (All IRRC vote data excludes abstentions.)

Support for New York-based Coniston Group's nearly successful bid to take over Gillette apparently spilled over to other dissident shareholder resolutions, said Carolyn Mathiasen, director of the social issues service at the Investor Responsibility Research Center, Washington.

The New York State &

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INSIDE

## PROPERTY in this issue

Making money with company-owned land is Delmarva Power & Light Co.'s corporate real estate philosophy, and that's just what the utility did with this data center. Details on Delmarva's strategy — along with stories on mortgage lenders scrambling for business and the world's largest real estate billboard — are in PROPERTY, a quarterly supplement on real estate finance and investing. Pages P1-P16.

## LATE NEWS

### Moratorium gaining momentum

WASHINGTON — A bill that would place a moratorium on employers using the surplus assets of terminated pension plans unexpectedly picked up speed last week when it was attached to an appropriations bill.

Amid objections by leaders of the Senate Finance Committee as well as the administration, the Senate Appropriations Committee voted to keep the proposal in the bill, which contains appropriations for the departments of Labor, Health and Human Services, and Education.

The bill will be considered on the Senate floor this week.

### Merger of 2 Russell units seen

TACOMA, Wash. — The Frank Russell Trust Co. and the Frank Russell Investment Co. reportedly will be combined under the command of Lynn Anderson, president and chief executive officer of the investment company.

Frank Russell Investment was launched in August 1981 as a mutual fund offering a series of commingled funds. Shares of the fund are only open to bank trust departments and tax-exempt funds that enter into an asset management agreement with Frank Russell Co., which is the manager of managers for the funds.

Frank Russell Trust Co. is also a manager of managers offering 10 pooled funds as well as separate accounts. The company is headed by Paul Kaltinick, president and chief executive officer.

The Frank Russell Co. declined to comment because the changes haven't been finalized.

### LaSalle seeks partner for capital

CHICAGO — LaSalle Partners Inc., Chicago, is looking for a minority partner, and among the candidates mentioned by sources are Dai-Ichi Mutual Life, Japan's second largest insurance company, and San Francisco-based Transamerica Corp.

William Sanders, chairman and chief executive officer of LaSalle, issued a statement saying "LaSalle Partners has been in discussion with several corporate and institutional organizations — both domestic and foreign — regarding a minority limited partnership investment in its firm."

Sources said Dai-Ichi and Transamerica are among those that have held discussions with LaSalle officials. Dai-Ichi, however, is considered the more likely candidate because Transamerica "wanted a little more involvement" in the firm than LaSalle executives were willing to permit, according to one source.

Some sources had said Dai-Ichi would pay up to $150 million for a 40% stake in LaSalle Partners and would provide its pension advisory division with another $1 billion in assets to manage. Mr. Sanders called those figures "totally inaccurate."

### Sponsors, advisers change jobs

Several pension industry executives have announced job changes recently.

• Charles P. Dunn, director-pension finance and investments at North American Philips Corp., New York, will join Reich & Tang L.P. July 11 as a vice president responsible for client servicing, marketing and development of new products.

He is replacing Gene Hoots, the former president of RJR Investment Management Inc. (now part of RJR Nabisco Inc., Atlanta). Mr. Hoots is joining Watnik and Son, a Springfield, N.J.-based pension consulting group.

• James Penner was expected to be named investment officer of the Montana Board of Investments, Helena, last week, replacing James Howeth, who is resigning effective June 30.

David Lewis, executive director of the board, which oversees nine state retirement plans with more than $2.6 billion in assets, said the expected appointment would be for a "probationary" period of three to six months, after which he expects Mr. Penner to be given the job permanently.

Mr. Howeth has formed his own investment firm, The Anna Corp., in Helena.

• In San Francisco, two Hambrecht & Quist Equity Management executives — Bill Welty, director of research, and Pat McBaine, executive vice president and head of institutional sales — are leaving the firm this summer to start separate investment management companies.

Mr. Welty will be succeeded by Barney Hallingby, now in institutional sales in the company's New York office; Mr. McBaine's successor hasn't been named.

• James E. Heard, who joined T. Boone Pickens' shareholder rights group United Shareholder Association six months ago as executive director, left to join Analysis Group Inc., to advise institutional investors on proxy voting issues.

Mr. Heard and a spokesman for USA said Mr. Heard's interests and the group's needs did not mesh and they reached a mutual decision to part ways.

Before joining the USA, Mr. Heard was deputy director of the Investor Responsibility Research Center in Washington, where he had worked for about nine years.

## DEPARTMENTS


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Vol. 18, No. 14 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1988.

# Funds gird for tax

## Australian plans move to domestic stock

SYDNEY, Australia — The Australian government's almost-certain imposition of taxes on domestic pension funds has caused a rush into domestic equities, and might augur significant shifts in funds' investment strategy.

The changes, proposed in the government's May 25 minibudget, already have generated a move into high-yield stocks, although some observers think that might have been premature. But pension experts believe the tax changes might lead to increased use of passive investment vehicles and decreased investments in bonds. And views differ on whether funds will cut overseas equities.

For all investors, the outlook for the previously lagging Australian stock market has brightened, as lower corporate taxes and higher inflation prospects have given it a boost.

The taxation of previously tax-exempt Australian funds has global significance, as many governments, including the United States, have looked to pension funds as a source of revenue. Last year, New Zealand imposed similar taxes on its pension funds.

The changes in the Australian system are expected to generate $770 million in new revenue as part of an expected $2.36 billion budget surplus. (All amounts reflect U.S. dollars.)

The growing Australian pension market has about $66 billion in assets.

The changes affecting Australian pension funds — known as superannuation funds here — take effect July 1, although industry is lobbying for postponement of some of the effective dates.

The new rules would impose a 15% tax on:

• investment income, including rents, dividends and interest;

• realized capital gains (measured as those exceeding the inflation rate — if the security is held for at least one year) in the year in which the asset is sold; and

• deductible employer contributions.

Pension funds, however, might be able to completely offset any taxes. Under the rules, funds will get a 39% tax credit on fully franked dividends — dividends from profits on which corporate tax has been paid. But the "imputation credit" cannot be used to offset taxes withheld by other countries on foreign stocks, thus lessening the allure of foreign markets.

But the availability of capital gains tax rates will make all equities — domestic and foreign — more attractive than bonds, making the impact on foreign stocks a wash, said Craig Ueland, managing director of Frank Russell Australia, Sydney.

The Australian stock market, which had lagged other world markets in recovering from last October, surged after the minibudget was announced. Although still far below its pre-crash 2,300 level, the All Ordinaries index climbed to 1600 in mid-June from 1470 May 25.

*Continued on page 37*

# Hedged indexes mulled

By Marlene Givant

Currency and asset allocation experts are urging pension fund executives to adopt fully hedged international portfolios and benchmarks — moves that could transform the investment management and risk/return profile of overseas investments.

The use of hedged benchmarks could revolutionize the way plan executives look at international investments as an asset class, causing the executives to focus just on underlying security returns, and separating the currency factor. An increased demand for hedging and adoption of hedged benchmarks also could force managers to build their hedging capabilities.

Only a few funds are starting to experiment with hedged benchmarks, but many are looking at the idea. The $3.5 billion endowment of The Common Fund, Fairfield, Conn., which has $1 billion in international equities and global bonds, sometimes uses a hedged benchmark, the Salomon Brothers Hedged World Government Bond index, to measure the volatility of global bond accounts.

Its primary global bond benchmark, however, is the Shearson Lehman Hutton Government/Corporate bond index, said Curt R. Tobey, vice president.

Many funds are considering adopting a full- or partial-hedge policy.

"Hedging is an issue we're actively looking at these days. We sort of believe the dollar is in a narrow trading range, but we're more serious (about hedging) now than a year ago," said Charles C. Weaver, director-pension funds of the $6 billion Southwestern Bell Corp. pension fund, St. Louis, which has 5% in international equities.

Most pension executives leave hedging decisions to their managers, who generally hedge into the U.S. dollar when they want protection from a rise in the currency. But the practitioners think funds should hedge not only when managers are bullish on the dollar but also when they are neutral.

Funds should only lift the dollar hedge when they expect to gain by doing so, the practitioners say.

Currency gains have accounted for much of the returns from international investing during the past few years, and some pension fund executives are looking to hedge because the party might be over.

Some observers fear increased demand for hedging and the use of hedged benchmarks by pension funds could force managers to hedge more than they otherwise would.

"There are strong academic arguments for being fully hedged as a normal position. My concern is

*Continued on page 37*

# Bank in record-keeping

NEW YORK — Manufacturers Hanover Trust Co. has been active in employee benefit participant record-keeping since 1984 and remains committed to that area for both defined benefit and defined contribution plans, according to Renee San Marco, vice president.

Manufacturers Hanover was listed incorrectly in a June 13 article as being among eight major banks to withdraw from participant record-keeping in the past two years.

"We feel our system can handle most employee benefit plans in existence today with no problems," said Eugene Bacich, vice president in charge of the bank's participant record-keeping department.

"The bank has made a major commitment to master trust and employee benefit trust services and record-keeping is part of that commitment for both defined benefit and defined contribution trusts."

Mr. Bacich said the bank plans to enhance its participant record-keeping system soon to handle daily valuations for unit accounts or company share accounts.

He said the Manufacturers Hanover system is flexible enough to support multiple vesting schedules or an individual vesting schedule for each fund included in a plan. In addition, the system can handle any combination of 99 investments and funding sources. ■

**Top index fund managers ($ millions - as of May 31)**

| | Total indexed | Domestic equity | Domestic fixed | International |
|---|---|---|---|---|
| Wells Fargo Investment[1] | 47,350 | 34,500 | 11,050 | 1,800 |
| Bankers Trust[2] | 21,291 | 18,547 | 2,494 | 250 |
| Mellon Capital Mgmt. | 20,000 | 17,000 | 2,700 | 300 |
| State Street Bank | 16,584 | 10,050 | 2,203 | 4,331 |
| America Nat'l Bank / Chicago[3] | 9,550 | 8,250 | 1,200 | 100 |
| Mitchell Hutchins | 6,750 | 250 | 6,500 | 0 |
| Mellon Bond | 5,800 | 0 | 5,800 | 0 |
| Alliance Capital Mgmt. | 5,540 | 4,800 | 240 | 500 |
| Dimensional Fund Advisors[4] | 5,000 | 3,500 | 1,100 | 400 |
| Boston Co. | 4,818 | 3,457 | 1,192 | 169 |
| GE Investment Advisors | 3,800 | 3,800 | 0 | 0 |
| Manufacturers Nat'l/Detroit | 3,123 | 3,100 | 23 | 0 |
| Wilshire Asset Mgmt. | 2,850 | 2,850 | 0 | 0 |
| Chase Investors Mgmt. | 2,393 | 1,350 | 343 | 700 |
| Lehman Mgmt. | 2,390 | 0 | 2,390 | 0 |
| Lincoln Capital | 2,266 | 0 | 2,266 | 0 |
| T. Rowe Price | 2,125 | 200 | 1,925 | 0 |
| Putnam Cos. | 1,579 | 0 | 1,579 | 0 |
| Northern Trust[5] | 1,357 | 894 | 142 | 17 |
| Prudential Asset Mgmt.[4] | 1,232 | 598 | 365 | 269 |
| Sears Investment | 1,260 | 1,260 | 0 | 0 |
| WR Lazard | 906 | 0 | 906 | 0 |
| BEA Associates | 886 | 580 | 306 | 0 |
| Vanguard Group | 811 | 788 | 23 | 0 |
| Security Capital Mgmt. | 779 | 0 | 779 | 0 |
| Citicorp | 704 | 704 | 0 | 0 |
| Capstone | 670 | 370 | 300 | 0 |
| MacKay-Shields Financial | 570 | 0 | 570 | 0 |
| Bernstein-Macaulay | 560 | 560 | 0 | 0 |
| Harris Trust | 488 | 288 | 200 | 0 |
| Axe Core Investors | 469 | 249 | 0 | 220 |
| FirstRepublic Bank | 464 | 414 | 50 | 0 |
| ASB Capital Mgmt.[4] | 430 | 430 | 0 | 0 |
| Centerre Trust | 385 | 385 | 0 | 0 |
| Travelers | 338 | 232 | 24 | 82 |
| Aetna Life | 310 | 240 | 70 | 0 |
| First Wisconsin Trust[4] | 305 | 80 | 225 | 0 |
| Fiduciary Trust | 300 | 0 | 300 | 0 |
| Old Kent Bank & Trust | 300 | 300 | 0 | 0 |
| Associated Capital Investors | 224 | 155 | 69 | 0 |
| Metropolitan Life | 222 | 222 | 0 | 0 |
| Todd Investments | 213 | 0 | 213 | 0 |
| Bear Stearns Asset Mgmt. | 190 | 0 | 190 | 0 |
| Nat'l Bank of Detroit | 160 | 160 | 0 | 0 |
| Kiene, Wooters & Associates | 150 | 100 | 50 | 0 |
| Advanced Investment Mgmt. | 103 | 93 | 10 | 0 |
| Chemical Investment Group | 103 | 0 | 103 | 0 |
| Westridge Capital | 100 | 100 | 0 | 0 |
| Western Asset | 82 | 0 | 82 | 0 |

[1] as of 4/30
[2] as of 1/1
[3] as of 3/1/87
[4] as of 3/31
[5] total includes $904 million in balanced indexed funds

# International spurs indexing

**By Curtis Vosti**

International index fund assets managed by 13 leading international indexers grew nearly 57%, to more than $9 billion, since Nov. 30, a *Pensions & Investment Age* survey shows.

Adjusted for market valuations — for the six months ended May 31, the Morgan Stanley Capital International Europe Australia Far East index returned 16.7% — international indexing still grew 40.4%.

The growth in international indexed assets, however, was not enough to offset sluggish growth in the domestic equity and fixed-income indexed arena, where the growth in total assets did not match the expected growth from market appreciation.

All told, 49 top index managers surveyed recently report indexing $178.3 billion in domestic and international accounts for tax-exempt clients.

Of the 36 managers surveyed both for May 31 and Nov. 30 figures, the total amount indexed increased to $168.52 billion from about $157.01 billion — an increase of only 7.3%.

The Nov. 30 figures in each of the three categories, adjusted for market appreciation, would have been expected to grow to $176.61 billion.

After adjusting the Nov. 30 figures for market growth, domestic equity indexing was down $11.1 billion, while domestic fixed-income indexing was up slightly.

Domestic equity index investments totaled $120.9 billion May 31 among the 49 index fund managers; domestic fixed-income index funds accounted for $47.5 billion.

On Nov. 30, 37 money managers cited $107.5 billion in domestic equity index funds and $43.7 billion in domestic fixed-income funds.

Of the 36 firms common to both surveys, domestic equity indexing increased to $113.39 billion from $107.45 billion, an increase of 5.5%.

For the six months ended May 31, the Standard & Poor's 500 stock index advanced 15.8%.

Among the 36 managers common to both surveys, the amount invested in domestic fixed-income indexed accounts rose to $45.99 billion from $43.74 billion, an increase of 5.1%.

For the six-month period ended May 31, the Shearson Lehman Hutton Government/Corporate bond index returned 3.7%.

Indexed accounts run in-house by 15 of the top 200 pension funds dropped $4.8 billion to $21.8 billion May 31, from $26.6 billion as of Jan. 1.

Those 15 sponsors reported $19.4 billion in domestic equity indexed accounts, with the remaining $2.3 billion in domestic fixed-income indexed accounts.

The assets of the 13 money managers that run international indexed accounts grew to $9.1 billion from $5.8 billion as of Nov. 30.

State Street Bank and Trust Co., Boston, reported the biggest gain in international indexed assets, $1.14 billion since Nov. 30, for a total of $4.33 billion.

Wells Fargo reported a $1.039 billion gain — to $1.8 billion — in assets indexed internationally.

"There's been a tremendous growth in international investing in general," said Peter Braun, vice president/director of marketing for State Street's asset management division. Large public pension funds, "think perhaps the best way to establish a core international portfolio is through an index process," he said.

Other factors he lists as favoring international indexing are the "pretty overwhelming" underperformance the last five years of active international managers when compared with the EAFE index and the relatively high costs of active international management.

While international indexing booms, the virtual stagnation of domestic indexing is due in part to the "maturing" of that industry, according to David Hurley, vice president for Investment Index Technologies Inc., Newark, N.J., a subsidiary of Prudential Asset Management, Newark, N.J. Prudential manages $1.2 billion in tax-exempt accounts spread between domestic equity and fixed

*Continued on page 38*

# Favia Hill shut down

## Chemical moves to stem more losses

**By Joel Chernoff**

NEW YORK — Chemical Bank's dismantling of its ill-fated Favia, Hill & Associates Inc. subsidiary is viewed as the final chapter in the firm's troubled five-year life span.

For now, the move is seen as a way to help Chemical staunch further losses of the unit's remaining equity business. Favia, Hill has $1.2 billion in equity assets, down substantially from its peak of $3.2 billion at year-end 1983.

It is an attempt to "salvage what they could on the equity side and not disappear into the night," said Eric Weissenberger, formerly a marketer for Favia, Hill and now director of marketing and client services for Home Capital Services Inc., New York.

"It's probably a good idea for them to consolidate the business," echoed Joseph Scarella, a consultant at Wyatt Asset Services, New York.

Clients have the choice of having their equity accounts transferred to one of three other Chemical equity management units: Texas Commerce Investment Management Co., Houston; Quantum Investment Management Inc., New York; or Investment and Capital Management Corp., Rolling Meadows, Ill.

Clients whose accounts had been run by Kenneth Rolland, chief investment officer of the disbanded unit, may retain him. Mr. Rolland is a managing director of Chemical Investment Group, which is the holding company structure for five of Chemical's investment management firms.

Outsiders, however, expect Chemical might lose many of its remaining equity accounts.

Favia's $3.8 billion in fixed-income assets and cash have been merged with the bank's Treasury Asset Management unit into a new subsidiary, Chemical Investment Management.

Chemical's Edward Madden said the bank is maintaining its commitment to equities.

Continuing to oversee the bond accounts in the new unit is William Budd, managing director-fixed-income management. Alexander Laird, recently hired from Hutton Asset Management, will continue to have responsibility for the $3 billion in cash management accounts brought from Treasury Asset Management.

Edward E. Madden, managing director for Chemical Investment Group, said the bank is maintaining its commitment to equity management and money management overall. Rumors had circulated earlier this year that Chemical might sell its money management operation, following the course of Citicorp and Manufacturers Hanover Corp.

Mr. Madden noted the bank is working on a plan to give key professionals a 19.9% stock interest in Chemical Investment Group, reflecting its commitment to money management. While the group's revenue is not disclosed, Mr. Madden said it is better this year than last year.

"There is no doubt that Chemical is committed to this business," he said. Chemical Investment Group has $13.7 billion in total assets under management.

Still, some observers believe Favia's history, including poor equity performance and turnover in key personnel, reflects the bank's sometimes half-hearted efforts to build an independent money management subsidiary.

"Chemical never jumped in and supported it," said an official at another New York money-center bank.

*Continued on page 38*

Photo by Linda Sue Scott

Greta Marshall will jump into starting her own investment firm after her stint with the California Public Employees' fund ends this week.

# Marshall diving into new waters

**By Curtis Vosti**

SACRAMENTO, Calif. — Avid skyjumper Greta Marshall is ready to take the plunge into entrepreneurship when she ends her three-year association with the $45 billion California State Employees' Retirement System this week.

Ms. Marshall is planning to start her own investment firm as soon as she can get commitments from the "two or three or four" partners she wants.

"I think it's coming together eventually, perhaps in a week" she said, adding "timing" prevented her from releasing the names of those who are expected to work with her.

It's another challenge the 50-year-old sportswoman and invest-

*Continued on page 38*

PORTFOLIO MANAGEMENT

FEATURE

# Fee schedule impact

## Individuals' pay affected

By Gregory Keshishian

As the use of performance-based fees gains greater acceptance, it might complicate the incentive compensation plans used by investment management firms.

Corporate clients need to understand these compensation trends and their effect on motivating portfolio managers to achieve desired performance. Sponsors have an indirect, but still influential, impact on compensation policy when negotiating performance-based fees.

The use of such fees might force compensation designers and decision-makers to focus even more heavily on individual contribution, possibly having an adverse effect on team effort.

If firm profitability is adversely affected by the new performance-based fee structures, there simply may not be enough money available to direct incentive compensation dollars strategically around the firm. Under certain circumstances, even the top-performing portfolio manager may not be assured an adequate bonus if firm profitability is hurt.

Behaviorally, this situation might reinforce internal competitiveness rather than cooperation, and would require management leadership to overcome possible divisiveness and lack of team spirit.

Providing high-quality professional talent with strong individual motivation to outperform the competition is still the primary focus of incentive plans. The challenge will be to achieve this when overall fees are under pressure, while preserving a collegial atmosphere.

In assessing current programs, an essential task is to determine whether the system is well-aligned with a firm's overall business objectives and human resources strategies.

To make it meaningful, there should be a retrospective evaluation of the compensation system's effectiveness and a willingness to fine tune or substantially modify it.

The introduction of performance-based fees may influence the revision and redesign of these systems.

Gregory Keshishian is a senior consultant with Handy Associates, New York, a compensation consulting firm.

This evolving parallel between management fees based on performance and portfolio manager compensation for performance may dramatically change the expectations of investment professionals as to what constitutes a fair and competitive reward.

The designers of pay plans in the industry have been faced with the dilemma of rewarding individual investment performance in the context of firmwide results. This has been complicated by the desire to achieve an equitable distribution of incentive dollars based on the asset size of portfolios managed (by individual portfolio managers) and firmwide fee income derived therefrom.

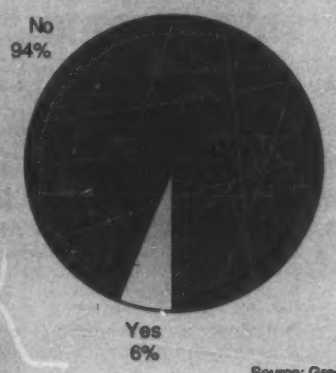
In the past, firm managements often have attempted to direct dollars to those individual portfolio managers whose personal investment performance was superior, even if overall firm performance was lackluster. Their ability to make such incentive distributions was attributable to the fact the primary determinant of firm revenue and profitability was total assets under management.

While there undoubtedly has been a cause-and-effect relationship between comparative investment performance and the movement of pension assets, the revenue stream from existing accounts continued as long as these accounts were in place. Thus, the flexibility to move compensation dollars to high individual performers was often retained, even if overall firm performance was not fully competitive in a given year.

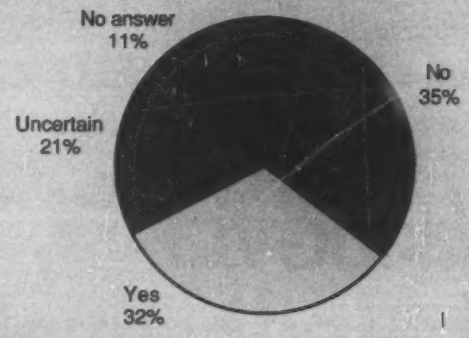
How will firms deal with the

*Continued on page 14*

**Do you have performance-based fees?**




**Do you favor regulation allowing performance-based fees?**




Source: Greenwich Associates, Greenwich, Conn.

# Crash puts drag on searches

CHICAGO — Money management searches are down 30% since the October crash, according to one major consultant's engagement activity.

Searches the firm has undertaken largely have been for non-equity investments, almost the reverse of the bullish sentiment before Oct. 19. An exception to the new bearishness is the post-crash upswing in interest in small-capitalization stock managers.

Based on its own activity, SEI Corp., Wayne, Pa., reports it was engaged for 45 searches in the six months ended April 30, down 30% from its 64 search engagements in the six months ended Sept. 30.

Of its post-crash searches, only 36%, or 16 searches, were for domestic equity managers (excluding small-cap stock managers).

By contrast, in the pre-crash period, 73%, or 47 searches, were for domestic equity managers (again, excluding small-cap managers).

Broader data compiled by SEI from published accounts in *Pensions & Investment Age* and elsewhere of non-SEI searches during the same periods confirm its own trend in search activity.

That data of non-SEI engagements show the number of searches fell 40% to 187 in the six post-crash months, from 309 in the pre-crash period. Of these post-crash searches, only 31%, or 58 searches, were for domestic equity managers (excluding small-cap searches), in contrast to 47%, or 145 searches, in the six pre-crash months.

"People are more conservative after the crash and are looking for less volatile investments, particularly, real estate and fixed income," said Dave O'Donovan, SEI vice president in Chicago, commenting on the survey.

In addition, he said, "They are looking at international (investments) for diversification."

SEI's Dave O'Donovan says funds are seeking less volatile investments after the crash.

The international move "doesn't fit as neatly into the conservative notion," he added. "But international markets are not as closely correlated with U.S. markets," underscoring their role in diversification, he added.

"Everyone is concerned about being vulnerable like they were in October," Mr. O'Donovan said.

Also, he noted many sponsors have undertaken asset allocation studies since the crash, putting off any searches. Comparison data on this activity weren't compiled.

In the period after the crash, SEI was engaged for five small-cap, one international fixed-income and nine real-estate searches, together comprising 33% of its consulting searches. By contrast, it was engaged in no searches for any of the three asset classes in the six months before the crash.

SEI's post-crash domestic fixed-income searches also were up, although only in relative terms considering all types of searches were down. SEI had 11 domestic fixed-income searches, representing 24% of all SEI search activity. In the pre-crash period, they totaled 12, or only 19% of its searches.

SEI's international equity searches fell in relative terms to three, or 7%, of total activity, in the post-crash months, compared with five, or 8%, in the pre-crash period.

The broader non-SEI search activity, however, showed international equity searches were up in relative terms, to 36 searches, or 19% of all searches, compared with 45 searches, or 14.5%.

SEI reported its search activity for October separately. In that month, it was engaged in seven searches — three for domestic equity, one for international equity and three for real estate.

The non-SEI data show a decidedly domestic fixed-income tilt. Of the 30 non-SEI searches in October, 12 were for domestic fixed income, 14 for domestic equity, three for international equity and one for real estate.

Other data for the non-SEI searches in the post-crash period, show that nine, or 5%, were for small-cap stocks; 28, or 15%, for real estate; 46, or 25%, for domestic fixed income; and 10, or 5%, for international fixed income.

By contrast, in the six pre-crash months, the non-SEI searches data show that five searches, or 1.6%, were for small-cap; 36, or 11.7%, were for real estate; 73, or 23.6%, were for domestic fixed income; and five, or 1.6%, for international fixed income. ■

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# Performance

*Continued from page 13*

possible effects of performance fees on profitability and annual incentive pay? One answer might be the strengthening of multiyear "consistency" measures in plan designs. In order to receive top rewards, successful fund managers may more often be required to produce top-quartile investment results over rolling two- or three-year periods.

One year's results might affect the target incentive award in the next year, or alter the payout of a prior year's award that had been deferred for the purpose of employee retention. This approach would smooth out the major variances in incentive pay, avoiding both windfalls and shortfalls.

Another approach might be to accept a much greater volatility in individual awards, regardless of firm performance. Thus, a top-performing portfolio manager would receive top pay even if the firm suffers a down year. Conversely, the annual bonus of a poorly performing manager would not be cushioned by firm profitability even in an overall up year.

This sink-or-swim mentality might become pervasive if firms cannot absorb the effects of significantly reduced revenue caused by poor portfolio results directly attributable to economic events or individual performance.

To understand why investment management firms are adjusting their incentive pay systems, it's helpful to understand the common shortcomings of current incentive compensation programs for professional portfolio managers.

One shortcoming is the failure to select and use appropriate criteria for performance measurement. Selecting the appropriate comparative universe or established market index is critical to the fairness and effectiveness of any pay for performance system.

The initial selection should not be a static one. Management firms and pension sponsors must reassess the appropriateness of their competitive "yardsticks" on a regular basis.

Periodic reviews of criteria ensure that changing economic conditions and market factors, as well as competitors' strategies, are factored into the incentive pay equation. Many firms find a combination of criteria is the fairest and most accurate way to assess performance.

A second problem area is uncertainty in determining how much to pay for the desired level of performance. Most firms strive to pay their portfolio professionals at competitive levels, or even aggressively when superior levels of investment performance have been achieved.

Common sense, as well as most existing annual incentive formulas, dictates high payouts be linked to high comparative performance and that low or no payouts will result from poor comparative performance. In an era of highly volatile firm revenue and earnings, beating the competition and market indexes in the relative sense might not be enough to justify aggressive compensation.

A distinct weakness of some plans is the failure to set appropriate targets for annual incentive pay. In many cases, the key to deriving real incentive (motivational) value from a compensation scheme is the firm's ability to communicate a potential target level of award to successful portfolio managers.

It is this simple quid pro quo that represents the essential element of annual incentive pay plans for investment professionals.

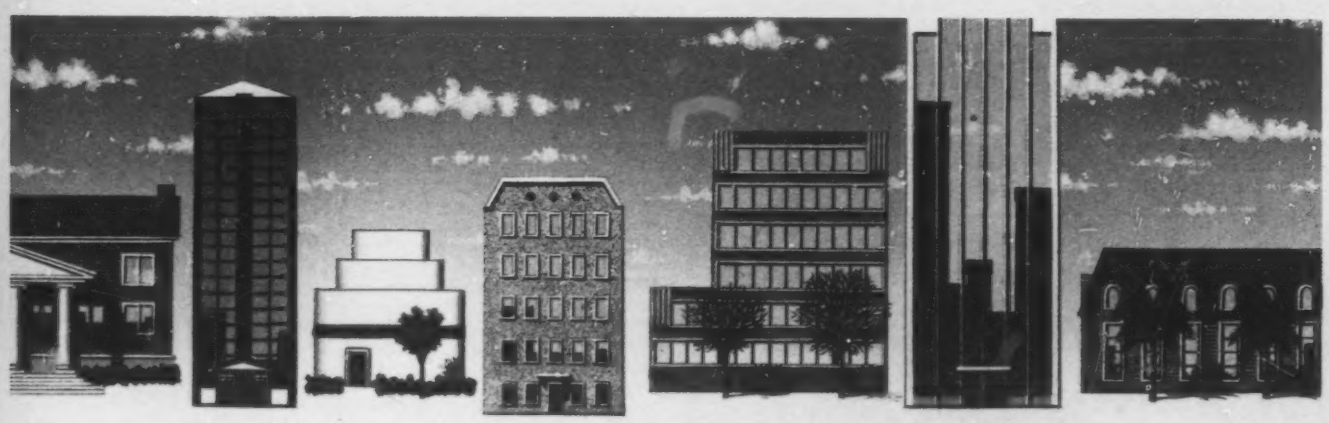
The top players need to know the rules, and what they stand to win or lose. This is what promotes energetic effort and gives added impetus to those who fulfill the responsibilities of institutional portfolio manager or corporate investment professional.

Finally, incentive pay programs often fail to support the investment and organizational strategy of the firm, both short and long term.

The internal structure and dynamics of the compensation arrangements must be consistent with the kind of individual and group behavior desired.

A plan should be designed to reinforce behavior that promotes the objectives of the firm (e.g., team play vs. star system) and to discourage non-productive behavior.

The incentive compensation issue is evolving rapidly and will be the subject of much further discussion. Firms should anticipate and address the potential effects (both positive and negative) of performance-based fees on their ability and willingness to pay, before financial circumstances limit their compensation flexibility. ■

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# Management firm spun off by Kemper

CHICAGO — Kemper Financial Services Inc. has spun off its investment management division into Kemper Asset Management Co. in order to position itself for expansion and acquisition.

The new subsidiary of the financial services company, widely known for its mutual fund and life insurance units, also will give its investment advisory services a higher public profile and enable the company to retain talented people and attract others, according to Len Spalding Jr., senior managing director of the new subsidiary.

Kemper Financial Services manages about $41 billion. Kemper Asset Management is managing the $3 billion in tax-exempt assets previously managed by Kemper Financial. Kemper Asset has about 50 clients, primarily pension funds.

Kemper's tax-exempt total is down about $1 billion from last year, because of the loss of one client, which Kemper officials would not name.

"The loss of one large client made Kemper realize that this thing won't swim by itself," Mr. Spalding said.

"We need to become known as our own entity, rather than as a part of Kemper. We also need to make people inside the Kemper organization aware of us."

"We're trying to build a base for substantial growth over the next several years," he said. "The company is interested in making it much bigger. We want to acquire other companies. We want to grow by acquisition and by managing money."

Kemper hopes to acquire companies for which it can provide strong marketing and sales abilities and through which it can develop hybrid investment products tailored to the needs of the client.

Mr. Spalding said Kemper might acquire a West Coast firm to support its clients there. ■

THE 50 LARGEST INTERNATIONAL MANAGERS

# Fixed income fuels growth

By Marlene Givant

Despite positive international equity performance and strong new flows into the asset class during the year ended March 31, international and global equities managed by the top 50 international investment advisers declined during the period.

If it were not for substantial growth in fixed-income accounts (to $9.621 billion from $6.8 billion), total international and global assets managed by the 50 advisers also would have decreased in the period.

The drop in equities to $38.235 billion from $39.009 billion puzzled industry experts but could stem from several factors, including the withdrawal from equities by some very large pension funds following Oct. 19, the loss of market share among the top 50 managers as domestic managers gained international business, and inaccuracies in figures firms reported the previous year.

After nearly doubling in the year ended March 31, 1987, U.S. tax-exempt assets in accounts with international and global mandates rose only 4.5% to $47.865 billion as of March 31, from $45.809 billion 12 months earlier, despite a flood of new money invested in 1987, according to the Money Mover Scorecard (*Pensions & Investment Age*, Feb. 8).

Assets in global accounts, which may invest in the United States, increased 8% to $9.49 billion vs. $8.762 billion a year earlier.

International accounts, which may not invest in U.S. investments, increased about 3.6% to $38.374 billion from $37.047 billion. Global accounts remain a small fraction of total equity assets but represent more than a third of fixed-income assets, up from 30.4% a year earlier.

The top four managers in last year's survey — State Street Bank and Trust Co., J.P. Morgan Investment Management Inc., Capital Guardian Trust Co. and Morgan Grenfell Investment Services Ltd. — held their standing in 1988, although assets of all the firms except State Street decreased.

The top two fixed-income managers among the top 50 — First Chicago Investment Advisors and WorldInvest Ltd. (former BA Investment Management International Ltd.) — run more bonds than equities with $1.482 billion and $1.148 billion, respectively, in fixed income.

Among all managers, Boston-based State Street for the second year led the rankings of combined global and international account assets, gaining 24% to $4.031 billion from $3.249 billion the previous period.

The gain represents a slowdown from the previous year when its assets more than doubled. Still, growth exceeded the 16.8% return of the Morgan Stanley Capital International Europe Australia Far East index, which most of State Street's accounts replicate.

The slower pace of indexing, as evidenced by State Street's growth, puzzled some observers.

"That's surprising," said Linda MacPherson, marketing manager of the WM Co., New York, noting the EAFE's good 1987 performance despite October's crash. "Maybe it's just a maturing market and people happy with the level of passive management are starting to pull back to active."

The slight drop in equities overall might have resulted from some very large funds liquidating their assets after the crash and from domestic managers starting to run international money at the expense of the top 50, she said.

Firms with less than $1 billion under management had the strongest percentage growth during the 12-month period, which is not surprising given they were building from a smaller asset base. The growth often was from new business, as some of the firms suffered badly in the stock market crash.

Julius Baer Investment Management Inc., New York, was the top gainer, with $610 million in assets — more than 2.5 times its total a year earlier. Barrie Martin, marketing director, attributed the enormous growth to good first-quarter 1988 performance and big injections from two funds — the Kansas Public Employees' Retirement System and the Illinois Municipal Retirement Fund.

Bankers Trust Investment Management Ltd., New York, whose assets rose 142% to $607 million, also had good performance and several new clients. Seven major clients were added, as the firm "initiated a dedicated global marketing and sales effort specifically for the U.S. tax-exempt market which was not in place before," according to a marketing assistant.

Brown Brothers Harriman & Co., New York, more than doubled its international and global assets to $646 million because the firm gained two large public fund accounts and because non-pension tax-exempt clients might have been omitted last year, which would have understated 1987's figures, said Paul A. Legvold, manager.

Other big gainers included SBC Portfolio Management International Inc., with a 73% increase; Posthorn Global Asset Management (formerly American Express Asset Management) with 69%; Alliance Capital Ltd. and Warburg Investment Management

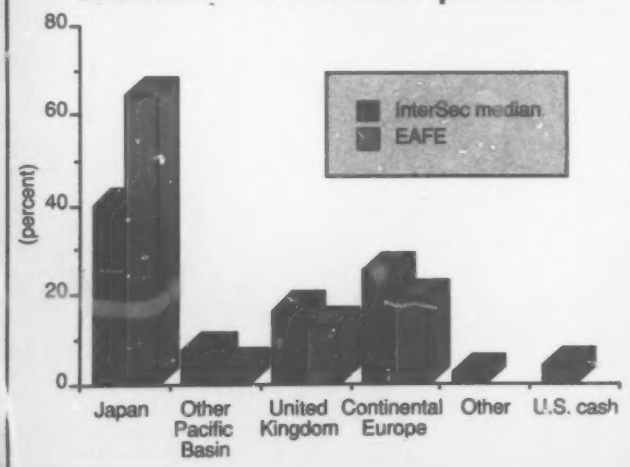
*Continued on page 32*

**Top 50 managers ranked by total U.S. tax-exempt assets in international and global accounts**

| | ($ millions) | | ($ millions) |
|---|---|---|---|
| State Street Bank | 4,031 | Bankers Trust | 607 |
| J.P. Morgan | 2,726 | Alliance Capital | 602 |
| Capital Guardian | 2,701 | IDS International | 566 |
| Morgan Grenfell | 2,684 | Scudder, Stevens & Clark | 565 |
| First Chicago | 2,314 | Fiduciary Trust* | 560 |
| Templeton International | 2,076 | Kemper-Murray Johnstone | 498 |
| Rowe Price-Fleming | 2,057 | Daiwa International | 481 |
| Grantham Mayo | 1,981 | ABD International | 359 |
| Batterymarch | 1,960 | Arnhold & S. Bleichroeder | 320 |
| Baring International | 1,902 | Capital Mgmt. International | 261 |
| Fidelity International | 1,825 | Martin Currie | 260 |
| Schroder Capital | 1,736 | Chase Investors International | 250 |
| WorldInvest | 1,424 | SBC Portfolio Mgmt. | 249 |
| Warburg Investment | 1,324 | Wellington International | 245 |
| N.M. Rothschild | 1,221 | Beutel, Goodman | 241 |
| Nomura Capital | 1,141 | Putnam Advisory | 239 |
| PCM International | 985 | Walter Scott | 237 |
| Wells Fargo | 971 | Hill Samuel/Invest. Advisers | 228 |
| Citicorp Investment | 806 | American National Bank | 221 |
| Oechsle International | 743 | Lombard Odier | 217 |
| Posthorn Global | 672 | Bessemer Group* | 190 |
| Brown Brothers Harriman | 646 | Boston International | 181 |
| G.T. Capital | 628 | Massachusetts Financial | 175 |
| Mellon-Pictet | 611 | Wertheim-Philippe | 171 |
| Julius Baer | 610 | Boston Co. | 167 |
| | | TOTAL | 47,865 |

* As of Dec. 31, 1987

**1st quarter geographic asset allocation of non-U.S. portfolios**




Source: InterSec Research Corp., Stamford, Conn.

# Style hard to classify

## Foreign managers defy pigeonholing

By Marlene Givant

Trying to pinpoint investment styles is not as easy in the international arena as it is in the domestic.

The fixed-income approach of Mellon-Pictet International Management Ltd., London, for example, emphasizes "getting the big picture right," according to its May 23 profile in *Pensions & Investment Age*.

The investment approach of its Pittsburgh-based sibling, Mellon Bond Associates, on the other hand, "establishes a performance benchmark for each actively managed account, followed by strict control of duration, yield, income and cash flow structure. Value is added by sector/quality spread valuation and issue selection."

The difference in the two descriptions highlights the lack of defined styles among active international managers. Foreign methods might be as disciplined and effective as domestic approaches, but many foreign managers prefer doing whatever works to being pigeonholed into one style category.

International markets also don't lend themselves as readily to style differentiation as U.S. markets. For instance, most foreign bond managers buy only high-quality government issues.

There are no signs of more defined styles catching on soon, although a number of international firms based in the United States or run by Americans — such as Grantham, Mayo, Van Otterloo & Co., Boston, and Morgan Stanley Asset Management, New York — use U.S.-type investment approaches.

Most international equity approaches are top-down in country selection and bottom-up in stock selection; there are few fixed-income approaches. For domestic investments, however, there are more than 10 general equity and about six fixed-income styles.

Ronald Boller, director-benefit finance of Owens-Illinois Inc., Toledo, Ohio, and chairman and director of Harbor Capital Advisors, the company's investment management subsidiary, said he can identify three dominant international equity styles: the use of small stocks; large-capitalization growth-oriented stocks; and large-cap value-oriented stocks. He said there are only two fixed-income styles: use and non-use of futures.

Owens-Illinois has more than 15% of its $2.3 billion in pension assets — including about $300 million from Brockway Co., a recent acquisition — in international.

"Styles really haven't developed yet; it'll come," Mr. Boller said. "When I got the job eight years ago there were only a few international managers. Now there are 80, 90 or 100. It's an embryonic industry, but it's growing very fast. With that will come more attitudes and styles."

He thinks new styles will emerge every year, encompassing "all the bells and whistles you see in this country."

Global asset allocation and quantitative approaches are coming on the scene slowly, but most managers don't think the international markets are as efficient as the U.S. market, so relying on fundamentals is the best way to yield results, said Chris Swain, investment consultant at Callan Associates, San Francisco.

"Most people I see tell me they're fundamental-oriented, active stock pickers. Some have a more defined system of developing a matrix of different factors they use to decide asset and country allocation, but breakdowns into value, growth and yield — I haven't seen (those) at all," Mr. Swain said.

Managers use a research-oriented, bottom-up process to find inefficiently priced stocks, a process they think qualifies them

*Continued on page 32*

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### ABD International Management Corp.

10 E. 53rd St., New York, N.Y. 10022; (212) 319-5020

| | |
|---|---|
| Total assets managed | $496,800,000 |
| Non-U.S. pension assets | $131,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $359,000,000 |
| International | $343,000,000 |
| Global | $16,000,000 |
| U.S. tax-exempt clients | 4 |
| Minimum separate account | $15,000,000 |

ABD International Management Corp., a subsidiary of Dresdner Bank, Frankfurt, and Hypo-Bank, Munich, managed $343 million in international equity accounts for U.S. tax-exempt clients as of March 31.

The international equity assets were committed most heavily to the United Kingdom, 18.5%; Germany, 6.4%; France, 5.7%; Japan, 46%; and Australia, 3.9%.

As of the same date, it had $16 million in global fixed-income accounts.

The firm is equity-oriented and seeks growth stocks with an emphasis on industry rotation worldwide and within markets. It concentrates especially on the effects of currency and reducing currency risk. It works toward the goals of protecting base currency value and obtaining high returns with low risk.

Analysts or portfolio managers are in Frankfurt, New York, Tokyo, Hong Kong and Singapore.

The firm reported a $192 million net loss in U.S. institutional tax-exempt business in the year ended March 31 for international and global accounts.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1980.

William D. Rutherford, president, is chief executive officer; Julie K. Boeder is client contact.

### Alliance Capital Ltd.

43 Upper Grosvenor, London W1X 9PG, U.K.; 011-44-1-493-9606

| | |
|---|---|
| Total assets managed | $1,806,000,000 |
| Non-U.S. pension assets | $1,205,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $601,000,000 |
| International | $578,000,000 |
| Global | $23,000,000 |
| U.S. tax-exempt clients | 13 |
| Minimum separate account | $15,000,000 |

Alliance Capital Ltd., a subsidiary of Alliance Capital Management L.P., managed $578 million in international equity accounts for U.S. tax-exempt clients as of March 31.

The international equity assets were committed most heavily to the United Kingdom, 11.9%; Germany, 17.8%; Netherlands, 17.4%; Japan, 16.6%; and Canada, 12.6%.

As of the same date, it had $23 million in global equity accounts.

The global equity assets were committed most heavily to the United Kingdom, 10.4%; Germany, 10.2%; Netherlands, 8.4%; Japan, 10.3%; and the United States, 49.6%.

The firm had $140 million in commingled accounts and $140 million in mutual funds.

The firm has an active growth-oriented philosophy. Research is used to identify investment opportunity through undervalued markets, currencies, industries and economic sectors.

Analysts or portfolio managers are in New York, London and Tokyo.

The firm reported a $175 million net gain in U.S. institutional tax-exempt business in the year ended March 31 for international and global accounts.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1971.

Dave Williams is chief executive officer; client contacts are Norman Bergel and in New York Carol Zipkin at (212) 969-1044.

### American National Bank & Trust Co. of Chicago

33 N. LaSalle St., Chicago, Ill. 60690; (312) 661-5586

| | |
|---|---|
| Total assets managed | $12,000,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $11,300,000,000 |
| International | $221,000,000 |
| U.S. tax-exempt clients | 200 |

American National Bank & Trust of Chicago, a subsidiary of First Chicago Corp., managed $221 million in international equity accounts for U.S. tax-exempt clients as of March 31.

The assets were committed most heavily to the United Kingdom, 13%; Germany, 5%; France, 4%; Switzerland, 3%; and Japan, 65%.

All assets were in commingled index accounts.

The firm bases its indexed investment approach on the EAFE index.

Analysts or portfolio managers are in Chicago.

The firm reported a $200 million net gain in U.S. institutional tax-exempt business in the year ended March 31 for international accounts.

The firm has non-U.S. currency hedging capability.

John R. Tilton is chief executive officer; Ken Sobolewski is client contact.

### Julius Baer Investment Management Inc.

330 Madison Ave., New York, N.Y. 10017; (212) 949-9055

| | |
|---|---|
| Total assets managed | $610,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $610,000,000 |
| International | $496,000,000 |
| Global | $114,000,000 |
| U.S. tax-exempt clients | 14 |
| Minimum separate account | $10,000,000 |

Julius Baer Investment Management Inc., a subsidiary of Bank Julius Baer & Co. Ltd., Zurich, managed $31 million in international equity and $465 million in international fixed-income accounts for U.S. tax-exempt clients as of March 31.

The international equity assets were committed most heavily to the United Kingdom, 15%; France, 7%; Switzerland, 10%; Netherlands, 7%; and Japan, 48%.

As of the same date, it had $114 million in global fixed-income accounts.

The firm had $100 million in mutual funds.

The firm uses very active currency allocation, emphasizing strong stable countries and highly liquid, high-quality securities. Short- to medium-range securities are used.

Analysts or portfolio managers are in London and Zurich.

The firm reported a $250 million net gain in U.S. institutional tax-exempt business in the year ended March 31 for international and global accounts.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1983.

Peter Widmer is chief executive officer; Jay Dimberger is client contact.

### Bankers Trust Investment Management Ltd.

280 Park Ave., New York, N.Y. 10015; (212) 850-2082

| | |
|---|---|
| Total assets managed | $67,010,000,000 |
| Non-U.S. pension assets | $6,063,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $60,947,000,000 |
| International | $460,000,000 |
| Global | $147,000,000 |
| U.S. tax-exempt clients | 340 |
| Minimum separate account | $10,000,000 |

Bankers Trust Investment Management Ltd., a subsidiary of Bankers Trust Co., managed $313 million in international equity and $147 million in international fixed-income accounts for U.S. tax-exempt clients as of March 31.

The equity assets were committed most heavily to the United Kingdom, 18%; Germany, 8%; France, 5%; Japan, 44%; and Canada, 4%.

As of the same date, it had $147 million in global fixed-income accounts.

The firm had $313 million in commingled accounts and $149 million in index funds.

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# Partners debate fees

By Nancy White Norkus

Developers and investors are haggling over fees in joint ventures, with payments as a percentage of construction dollars averaging 5% to 6% plus leasing and property management fees.

The variation in fee payments project cost differences and industry clout. Big investors spend billions of dollars annually developing real estate but pay next to nothing for developer input.

For example, Aetna Realty Investors Inc., Hartford, Conn., pays construction cost "plus 1% to 2% as long as executive salaries and other miscellaneous fees are excluded," said James Richmond Jr., president. The goal of fee negotiation "is to get to the costs — how many people were involved and for how long," he said.

"We'll cover the developer's out-of-pocket costs, but not much more, since they are also earning ownership interest in the property and will share in its returns. Actual development is not supposed to be a profit maker," Mr. Richmond said.

Those with fewer dollars to spend, however, will pay more for developer expertise.

Differences in design can also skew developer costs. "With office space or hotels the fee tends to be lower — 2% to 3% — because of pattern repetition." Retail projects "might run 5% to 6% or higher because no two design elements are the same," said Jay A. Rosenfeld, executive vice president of Indianapolis' Melvin Simon & Associates.

"Sometimes contracts are worded to make a fee sound low, but in actual dollars, the amount is high," cautioned Edward P. Griffin, president of the financial services group, The Koll Co., Newport Beach, Calif.

"Sometimes management and leasing fees are included, sometimes they're not. It depends upon the developer," he said. In "the wonderful world of bidding," actual costs can be buried within contractual jargon, and variation is often the result of project size and market positioning."

The fee is "purely a condition of the strength from which you deal," such as the developer's position in the market and its financial health, said Stewart H. Buckle III, vice president of Norfolk, Va.-based Goodman Segar Hogan, a developer.

"The bigger players can do most of the projects on their own, while smaller firms lack the capital to operate without financial backup" and are less well-rewarded.

One small developer, Rosen Associates, Jericho, N.Y., charges 5% to 6% for big projects, and 10% to 12% for $2 million to $25 million deals.

Big players in real estate investing also profit through magnitude, cutting better deals with developers than can some smaller investors.

Both sides of a joint venture have "a gut need to receive compensation for their services. These include developer expertise, and, on the other side, cash or multinational prestige," noted Leonard I. Korman, partner, The Korman Co., a developer in Trevose, Pa.

Koll's Mr. Griffin said his firm's fees are higher — 3% to 6% — because payment must cover both hard costs (mainly construction) and soft costs (such as architectural work and interest payments on the land).

Confusion over fees often is caused by contractual provisions or exclusions.

Joint venture fees at The Nichols Co., Voorhees, N.J., are "in the 5% range," but include property management and leasing expenses, said Peter Corcoran, project manager.

Such expenses are excluded from many developer's joint venture fees and are negotiated separately, based on the going market rate said Koll's Mr. Griffin. ■

## Developer fees in joint ventures

| | Square feet developed (per year) | Specialty | Fees* (%) |
|---|---|---|---|
| American Continental Properties New York | 1,500,000+ | Retail/ hotel | 0-3 |
| Goodman Segar Hogan Norfolk, Va. | 150,000+ | Retail | 3-5 |
| The Hahn Co. San Diego | 2,000,000+ | Retail | 3-6 |
| The Koll Co. Newport Beach, Calif. | 2,500,000+ | Office/ industrial | 3-6 |
| The Korman Co. Trevose, Pa. | 250,000+ | Mixed use | 4-6 |
| The Nichols Co. Voorhees, N.J. | 2,000,000+ | Office/ warehouse | 4-5 |
| Rosen Associates Jericho, N.Y. | 500,000-1,000,000 | Retail/ mixed use | 10-12** 5-6 |
| Melvin Simon & Associates Indianapolis | 4,500,000+ | Retail/ mixed use | 5-6 |
| The Zaremba Center Point Co. Lakewood, Ohio | 800,000+ | Community retail | 3-6 |

* Fees are a percentage of "hard dollar" construction costs
** 10%-12% for under $25 million; otherwise, 5%-6%

# Ad campaign spells defeat for initiative

Voters in Orange County, Calif., defeated a slow-growth initiative earlier this month that was attacked through a $2 million advertising campaign.

Measure A would have required developers to provide improved traffic flow, fire protection, police protection and park services in unincorporated areas of the county they developed.

Supporters, who had only $48,000 to spend on advertising, blamed their defeat on opponent's heavy use of television commercials, largely funded by development and construction companies.

The measure was defeated by about 53,000 votes.

Had the initiative passed, both sides expected it would spark the introduction of similar measures nationwide. Another slow-growth initiative was defeated in Pasadena, but one was approved in San Clemente. ■


*LaSalle Advisors Limited*

*Real Estate Investment Advisor to Qualified Tax-exempt Institutions*

*Over $2,000,000,000 Under Management*

*LaSalle Advisors Limited purchased 2.1 million square feet of prime industrial property in Columbus, Ohio on behalf of one of its closed-end group trusts.*

*LA SALLE ADVISORS*
*Limited*
*Real Estate Advisory Services*
*Chicago, Illinois 60603*

*A Subsidiary of LaSalle Partners Limited*

The firm offers active and passive international equity approaches. The active approach uses macroeconomic analysis to select investments in countries, sectors and companies that can sustain above-average relative growth. Its global fixed-income approach employs active currency management and limited portfolio duration, active sector selection and value swapping. Its short-term fixed-income approach uses active currency and issue selection.

Analysts or portfolio managers are in New York, London, Tokyo, Zurich and Sydney.

The firm reported a $62 million net gain in U.S. institutional tax-exempt business for international and global accounts in the year ended March 31.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1982.

Jonathan F. Lubran is chief executive officer; Lynne S. Minard is client contact.

### Baring International Investment

9 Bishopsgate, London EC2N 3AQ, U.K.; 011-44-1-623-5264

| | |
|---|---|
| Total assets managed | $2,060,000,000 |
| Non-U.S. pension assets | $158,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $1,902,000,000 |
| International | $1,902,000,000 |
| U.S. tax-exempt clients | 26 |
| Minimum separate account | $10,000,000 |

Baring International Investment, a subsidiary of Baring International Management, managed $1.492 billion in international equity and $410 million in international fixed-income accounts for U.S. tax-exempt clients as of March 31.

The international equity assets were committed most heavily to the United Kingdom, 15%; Germany, 8%; France, 4%; Switzerland, 5%; and Japan, 39%.

The firm had $176 million in commingled accounts and $116 million in index funds.

The firm places particular emphasis on country selection and weighting from a top-down perspective. Stock selection is based on company fundamentals in local market contexts. Changes in the rate of profit growth are important to the strategy.

Analysts or portfolio managers are in London, Tokyo, Hong Kong, Seoul and Sydney.

The firm reported a $252 million net gain in U.S. institutional tax-exempt business in the year ended March 31 for international accounts.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1980.

Peter S. Hartley, managing director, is chief executive officer; John F. McNamara is client contact at (617) 357-9074.

### Batterymarch Financial Management

600 Atlantic Ave., Boston, Mass. 02210; (617) 973-9300

| | |
|---|---|
| Total assets managed | $8,051,000,000 |
| Non-U.S. pension assets | $44,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $7,180,000,000 |
| International | $1,016,000,000 |
| Global | $944,000,000 |
| U.S. tax-exempt clients | 77 |
| Minimum separate account | $10,000,000 |

Batterymarch Financial Management managed $1.016 billion in international equity accounts for U.S. tax-exempt clients as of March 31.

The assets were committed most heavily to the United Kingdom, 17%; Germany, 13%; France, 11%; Japan, 25%; and Canada, 14%.

As of the same date, it had $944 in global equity accounts, committed most heavily to the United Kingdom, 5%; Germany, 5%; Japan, 11%; Canada, 4%; and the United States, 60%.

The firm had $628 million in commingled accounts and $519 million in mutual funds.

The firm uses global corporate valuation models, applying its contrarian, value-oriented philosophy using a disciplined, efficient, automated investment process. Primary emphasis is placed on the systematic identification of undervalued stocks to capture stocks that are inefficiently priced by the market.

Analysts or portfolio managers are in Boston.

The firm reported a $599 million net gain in U.S. institutional tax-exempt business in the year ended March 31 for international and global accounts.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1969.

Dean LeBaron, trustee, is chief executive officer; Susan Weiner, trustee, is client contact.

### The Bessemer Group Inc.

630 Fifth Ave., New York, N.Y. 10111; (212) 708-9296

| | |
|---|---|
| Total assets managed* | $5,300,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $636,000,000 |
| International | $190,000,000 |
| U.S. tax-exempt clients | 75 |
| Minimum separate account | $5,000,000 |

*Total figure only is as of Dec. 31, 1987

The Bessemer Group Inc. invested $190 million in international equity accounts for U.S. tax-exempt clients as of March 31.

The assets were committed most heavily to Japan, 39%; the United Kingdom, 17%; Spain, 8%; Switzerland, 5%; and France, 4%.

The firm uses a top-down orientation with a focus on macroeconomic analysis, control of currency exposure and analysis of emerging economies, technologies and companies. Active management of sectors and geographic commitments are its principal focus.

Analysts or portfolio managers are in London and New York.

The firm has non-U.S. currency hedging capability.

John R. Whitmore is chief executive officer; Jane N. Abitanta is client contact.

### Beutel, Goodman International PLC

37-39 St. Andrew's Hill, London EC4V 5BY, U.K.; 011-44-1-489-0218

| | |
|---|---|
| Total assets managed | $346,000,000 |
| Non-U.S. pension assets | $35,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $241,000,000 |
| Global | $241,000,000 |
| U.S. tax-exempt clients | 1 |
| Minimum separate account | $10,000,000 |

Beutel, Goodman International PLC managed $241 million in global fixed-income accounts as of March 31.

The firm believes early identification of investment opportunities can be achieved most consistently through a relative value analysis across countries. Research focuses on active country allocation in liquid markets. It uses the highest quality securities in the medium to long end of the market.

Analysts or portfolio managers are in London.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1985.

Olaf Rogge is chief executive officer and client contact. Prospective clients also may contact Fairfield Capital Associates at (203) 254-1215.

### Arnhold & S. Bleichroeder International

45 Broadway, New York, N.Y. 10006; (212) 943-9200

| | |
|---|---|
| Total assets managed | $345,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $320,000,000 |
| International | $320,000,000 |
| U.S. tax-exempt clients | 9 |
| Minimum separate account | $10,000,000 |

Arnhold & S. Bleichroeder International managed $320 million in international equity accounts for U.S. tax-exempt clients as of March 31.

The assets were committed most heavily to the United Kingdom, 32%; France, 6%; Denmark, 5%; Australia, 17%; and Hong Kong, 10%.

Securities, not countries, are emphasized in the investment approach. The firm evaluates the fundamental criteria of a company and compares absolute and relative price-earnings and price-cash flow. It targets a 50% rate of return for each 30-stock portfolio over a 12- to 24-month time hori-


# OUR VIEW OF INVESTING OUTSIDE AMERICA

Following the period of retrenchment in the wake of the October crash, fund managers in America are once again looking overseas. But performance in the different markets has not been uniform in either equities or bonds. With the help of James Capel, a global investment house with close to 200 analysts covering 5000 companies on 25 stock markets around the world, institutional investors have more access to more international opportunities than ever before. The benefits associated with diversifying investments internationally are familiar to the experienced fund managers. Risk is spread and as the selection of stocks is increased, so too are the opportunities.

To make the most of these opportunities requires discipline, experience and the ability to interpret the implications of currency, macro-economic influences and market sentiment. Analysts must have the support of colleagues in different markets, across different time zones, in order to provide a perspective on their own specialty. Whether investing in a major market like Tokyo or an emerging market like Manila, the analyst advising you, or the salesman executing your instructions should not be working in isolation.

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zon.

Analysts or portfolio managers are in New York.

The firm reported a $17 million net gain in U.S. institutional tax-exempt business in the year ended March 31 for international accounts.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1959.

Howard B. Moss is chief executive officer; Frederic C. Reynolds is client contact.

### The Boston Co. Inc.

1 Boston Place, Boston, Mass. 02108; (617) 722-7314

| | |
|---|---|
| Total assets managed | $24,125,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $18,040,000,000 |
| International | $167,000,000 |
| U.S. tax-exempt clients | 270 |
| Minimum separate account | $20,000,000 |

The Boston Co. Inc., a subsidiary of Shearson Lehman Hutton Inc., managed $167 million in international equity accounts for U.S. tax-exempt clients as of March 31.

The assets were committed most heavily to Japan, 66%; the United Kingdom, 14%; Germany, 5%; France, 4%; and Switzerland, 3%.

The firm had $145 million in commingled accounts; all the assets were in index funds.

The firm offers a combination of passive and active strategies incorporating 12 equity country index funds and a quantitatively based tactical asset allocation strategy.

Analysts or portfolio managers are stationed in Boston and London.

The firm reported a $45 million net gain in U.S. institutional tax-exempt business in the year ended March 31 for international accounts.

It has non-U.S. currency hedging capability and has been registered with the SEC since 1965.

James Von Germeten, president and chief investment officer, is the chief executive officer; John L. Carty, senior vice president, is client contact.

### Boston International Advisors Inc.

1 Liberty Square, Boston, Mass. 02109; (617) 574-9050

| | |
|---|---|
| Total assets managed | $205,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $181,000,000 |
| International | $181,000,000 |
| U.S. tax-exempt clients | 4 |
| Minimum separate account | $10,000,000 |

Boston International Advisors Inc. managed $181 million in international equity accounts for U.S. tax-exempt clients as of March 31.

The assets were committed most heavily to the United Kingdom, 11%; Germany, 6%; France, 8%; Belgium, 5%; and Japan, 55%.

The firm had $93 million in mutual funds and $66 million in index funds.

The investment style uses quantitative value techniques to allocate assets among EAFE markets and to select stocks within those markets. The firm also manages custom index funds — EAFE, GDP and South Africa-free.

Analysts or portfolio managers are in Boston.

The firm reported a $98 million net gain in U.S. institutional tax-exempt business in the year ended March 31 for international accounts.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1987.

Lyle H. Davis, president, is chief executive officer; Jennifer Dunning is client contact.

### Brown Brothers Harriman

59 Wall St., New York, N.Y. 10005; (212) 493-1818

| | |
|---|---|
| Total assets managed | $11,700,000,000 |
| Non-U.S. pension assets | $39,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $5,600,000,000 |
| International | $631,000,000 |
| Global | $15,000,000 |
| U.S. tax-exempt clients | 309 |
| Minimum separate account | $5,000,000 |

Brown Brothers Harriman & Co. managed $435 million in international equity and $196 million in international fixed-income accounts for U.S. tax-exempt clients as of March 31.

The international equity assets were committed most heavily to the United Kingdom, 22%; Germany, 10%; Switzerland, 6%; Japan, 30%; and Hong Kong/Singapore, 7%.

As of the same date, it had $15 million in global fixed-income accounts.

The firm invests in countries whose growth rates exceed that of the United States and whose policies are pro-investment. Its strategy seeks marketability, hedges currency risk when appropriate and manages reserves aggressively.

Analysts or portfolio managers are in New York, Tokyo, London, Paris and Zurich.

The firm reported a $129 million net gain in U.S. institutional tax-exempt business in the year ended March 31 for international and global accounts.

The firm has non-U.S. currency hedging capability.

Elbridge T. Gerry Jr., partner, is chief executive officer; Paul A. Legvold is client contact.

### Capital Guardian Trust Co.

333 S. Hope St., Los Angeles, Calif. 90071; (213) 486-9200

| | |
|---|---|
| Total assets managed | $14,887,000,000 |
| Non-U.S. pension assets | $111,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $14,776,000,000 |
| International | $2,458,000,000 |
| Global | $243,000,000 |
| U.S. tax-exempt clients | 105 |
| Minimum separate account | $10,000,000 |

Capital Guardian Trust Co., a subsidiary of the Capital Group Inc., managed $2.388 billion in international equity and $70 million in international fixed-income accounts for U.S. tax-exempt clients as of March 31.

The international equity assets were committed most heavily to the United Kingdom, 14%; Germany, 10%; Japan, 19%; Australia, 9%; and Hong Kong, 5%.

As of the same date, it had $216 million in global equity and $27 million in global fixed-income accounts.

The global equity assets were committed most heavily to the United Kingdom, 10%; Germany, 7%; Switzerland, 5%; Japan, 9%; and the United States, 46%.

The firm had $528 million in commingled accounts.

The firm uses a fundamental value-oriented investment approach based on detailed research supported by direct management contacts. An additional focus is provided by portfolio managers and analysts with country or area economic, political and social overview responsibilities.

Analysts or portfolio managers are in London, Geneva, Tokyo, Hong Kong, Washington, Los Angeles, San Francisco and New York.

The firm reported a $155 million gain in U.S. institutional tax-exempt business in the year ended March 31 for international and global accounts.

The firm has non-U.S. currency hedging capability.

John H. Seiter, senior vice president, is client contact.

Public funds: Nov. 28.

### Capital Management International of Deutsche Bank

9 W. 57th St., New York, N.Y. 10019; (212) 832-1630

| | |
|---|---|
| Total assets managed | $2,065,000,000 |
| Non-U.S. pension assets | $118,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $261,000,000 |
| International | $261,000,000 |
| U.S. tax-exempt clients | 2 |
| Minimum separate account | $10,000,000 |

Capital Management International of Deutsche Bank, a subsidiary of Deutsche Bank, managed $206 million in international equity and $55 million in international fixed-income accounts for U.S. tax-exempt clients March 31.

The equity assets were committed most heavily to Japan, 30%; Germany, 21%; United Kingdom, 21%; Netherlands, 10%; and Spain, 7%.

The firm uses an active, top-down, fundamentally driven approach, which begins with macroeconomic analysis of currencies and countries. These


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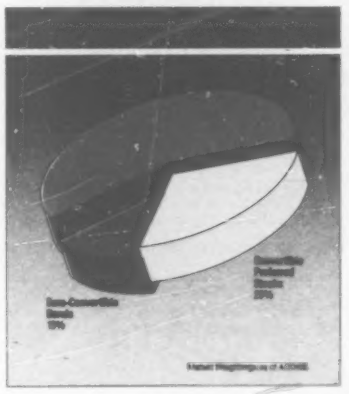

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analyses form the basis for country weightings of model portfolios. Stock selection emphasizes favorable balance sheets, low p/e ratios, profitability and earnings growth. The fixed-income approach centers on analyzing and forecasting currency and interest rate trends. Currency and interest rate scenarios are weighted against each other; those markets offering the greatest potential for gain from both factors are given the highest weighting.

Analysts or portfolio managers are in Frankfurt/Main, Dusseldorf, Geneva, Zurich, New York, London, Tokyo and Melbourne.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1984.

Rudolf Heinz, managing director and chief investment officer, is chief executive officer; Michael Tintelnot, general manager and vice president, is client contact.

Master trust: Aug. 22.

### Chase Investors International

Woolgate House, Coleman Street, London EC2P 2HD U.K.: 011-44-1-726-3364

| | |
|---|---|
| Total assets managed | $2,200,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $250,000,000 |
| International | $250,000,000 |
| U.S. tax-exempt clients | 10 |
| Minimum separate account | $10,000,000 |

Chase Investors International, a subsidiary of Chase Investors Management Corp., managed $200 million in international equity and $50 million in international fixed-income accounts for U.S. tax-exempt clients as of March 31.

The equity assets were committed most heavily to the United Kingom, 13%; Germany, 7%; Switzerland, 9%; Netherlands, 6%; and Japan, 37%.

The firm had $250 million in commingled accounts.

Its investment approach is based on economic forecasting. Detailed analysis of major macroeconomic variables determines the outlook for currencies and markets on a rolling time horizon. The portfolios are characterized by separating the asset and currency decision within each market; differing exposures are reconciled by the use of forward foreign exchange contracts.

Analysts or portfolio managers are in New York, London and Tokyo.

The firm reported a $20 million net gain in U.S. institutional tax-exempt business in the year ended March 31 for international accounts.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1972.

J. Richard Zecher is chief executive officer; Gail K. Campbell is client contact.

### Citicorp Investment Management Inc.

Cottons Centre, 6th Floor, P.O. Box 200, Hays Lane, London, SE1 2QT U.K.; 011-44-1-234-2560
153 E. 53rd St., New York, N.Y. 10043; (212) 559-9529

| | |
|---|---|
| Total assets managed | $34,400,000,000 |
| Non-U.S. pension assets | $1,200,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $14,900,000,000 |
| International | $601,000,000 |
| Global | $205,000,000 |
| U.S. tax-exempt clients | 424 |
| Minimum separate account | $10,000,000 |

An agreement to sell Citicorp Investment Management's domestic institutional investment management business to USF&G Financial Services Corp. was signed May 6. International institutional investment management will remain with Citicorp. Responses reflect the firm's assets under management as of March 31.

Citicorp Investment Management managed $336 million in international equity and $265 million in international fixed-income accounts for U.S. tax-exempt clients as of March 31.

The international equity assets were committed most heavily to the United Kingdom, 21%; Germany, 3%; France, 4%; Spain, 6%; and Japan, 52%.

As of the same date, it had $137 million in global equity and $68 million in global fixed-income accounts.

The global equity assets were committed most heavily to the United Kingdom, 10%; Germany, 2%; Switzerland, 2%; Spain, 3%; Japan, 37%; and the United States, 38%.

The firm had $119 million in commingled accounts.

The investment strategy relies on active management of potential sources of return (country allocation, securities selection, currency management), with emphasis on macroeconomic, top-down analysis. Special attention is given to maximizing diversification benefits.

Analysts or portfolio managers are in London, Tokyo, Hong Kong, Sydney and New York.

The firm reported a $50 million net gain in U.S. institutional tax-exempt business in the year ended March 31 for international and global accounts.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1972.

Robert G. Wade Jr., chief investment officer, is chief executive officer; Robert Troxler is client contact in London.

### Martin Currie Ltd.

29 Charlotte Square, Edinburgh EH2 4HA U.K.; 011-44-31-225-3811

| | |
|---|---|
| Total assets managed | $3,870,000,000 |
| Non-U.S. pension assets | $1,840,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $260,000,000 |
| International | $135,000,000 |
| Global | $125,000,000 |
| U.S. tax-exempt clients | 5 |
| Minimum separate account | $20,000,000 |

Martin Currie Ltd. managed $135 million in international equity accounts for U.S. tax-exempt clients as of March 31.

The assets were committed most heavily to the United Kingdom, 17%; Germany, 4%; France, 6%; Japan, 48%; and Canada, 6%.

As of the same date, it had $125 million in global equity accounts.

The global assets were committed most heavily to the United Kingdom, 14%; Germany, 3%; Japan, 32%; Canada, 2%; and the United States, 27%.

The firm uses a two-stage investment process. First, markets are selected using various screens, particularly a currency screen. Secondly, stocks are selected through the use of qualitative and quantitative screens. Japan and the United Kingdom always are in portfolios.

Analysts or portfolio managers are in Edinburgh.

The firm reported a $26 million net gain in U.S. institutional tax-exempt business in the year ended March 31 for international and global accounts.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1978.

Michael Kennedy, president of Martin Currie Inc., is chief executive officer and client contact.

### Daiwa International Capital Management Corp.

200 Liberty St., New York, N.Y. 10281; (212) 945-0099

| | |
|---|---|
| Total assets managed | $17,045,000,000 |
| Non-U.S. pension assets | $351,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $481,000,000 |
| International | $481,000,000 |
| U.S. tax-exempt clients | 7 |
| Minimum separate account | $5,000,000 |

Daiwa International Capital Management Corp., a subsidiary of Daiwa International Capital Management Co. Ltd., managed $481 million in international equity accounts for U.S. tax-exempt clients as of March 31.

The assets were committed most heavily to the United Kingdom, 10%; Germany, 6%; France, 4%; Switzerland, 7%; and Japan, 58%.

The firm had $18 million in commingled accounts.

The firm focuses on companies that will lead the economic growth of each country and on those able to sustain high earnings growth through superior management.

Analysts or portfolio managers are

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Merrill Lynch

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in New York, London and Tokyo.

The firm reported a $127 million net loss in U.S. institutional tax-exempt business for international accounts in the year ended March 31.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1981.

Yasutaka Kimura, president, is chief executive officer; Robert Russell is client contact at (212) 341-5405.

### Fidelity International Investment Advisors Ltd.

111 Devonshire St., Boston, Mass. 02109; (617) 570-6330

| | |
|---|---|
| Total assets managed | $2,450,000,000 |
| Non-U.S. pension assets | $625,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $1,825,000,000 |
| International | $1,550,000,000 |
| Global | $275,000,000 |
| U.S. tax-exempt clients | 18 |
| Minimum separate account | $20,000,000 |

Fidelity International Investment Advisors Ltd., a subsidiary of Fidelity International Ltd., managed $1.55 billion in international equity accounts for U.S. tax-exempt clients as of March 31.

The assets were committed most heavily to the United Kingdom, 35%; Spain, 10%; Japan, 45%; and Canada, 5%.

As of the same date, it had $275 million in global equity accounts.

The global equity assets were committed most heavily to the United Kingdom, 22%; Spain, 8%; Japan, 25%; Canada, 3%; and the United States, 37%.

The firm's geographic and asset allocation are decided by the international investment policy group. Once assets are allocated to countries, stock selection is made by investment managers at the local level.

Analysts or portfolio managers are in Boston, London, Tokyo, Hong Kong and Bermuda.

The firm reported a $175 million net loss in U.S. institutional tax-exempt business in the year ended March 31 for international and global accounts.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1977.

James E. Tonner is chief executive officer; William B. Fink is client contact.

### Fiduciary Trust Co. International

2 World Trade Center, New York, N.Y. 10048; (212) 466-4100

| | |
|---|---|
| Total assets managed* | $9,352,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $6,050,000,000 |
| International | $116,000,000 |
| Global | $444,000,000 |
| U.S. tax-exempt clients | 183 |
| Minimum separate account | $10,000,000 |

*as of Dec. 31, 1987

Fiduciary Trust Co. International managed $91 million in international equity and $25 million in international fixed-income accounts for U.S. tax-exempt clients as of Dec. 31.

The equity assets were committed most heavily to the United Kingdom, 27%; Europe, 14%; Japan, 45%; and Far East, 8%.

As of the same date, it had $444 million in global fixed-income accounts.

The firm had $90 million in commingled accounts and $76 million in mutual funds.

Its investment approach emphasizes stock selection within a macroeconomic framework. The active style produces concentrated portfolios in stocks and markets. Country allocations vary from EAFE weightings according to the firm's market assessment. Currency and market diversification are used to reduce risk. Long-term hedging may be used.

Analysts or portfolio managers are in New York, London, Geneva and Los Angeles.

The firm reported a $33 million net gain in U.S. institutional tax-exempt business in the year ended Dec. 31 for international and global accounts.

The firm has non-U.S. currency hedging capability.

Lawrence S. Huntington is chief executive officer; George Mullin and Belinda Gibbs are client contacts.

### First Chicago Investment Advisors

3 First National Plaza, Chicago, Ill. 60670; (312) 732-6474

| | |
|---|---|
| Total assets managed | $9,768,000,000 |
| Non-U.S. pension assets | $85,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $9,458,000,000 |
| International | $2,198,000,000 |
| Global | $116,000,000 |
| U.S. tax-exempt clients | 79 |
| Minimum separate account | $10,000,000 |

First Chicago Investment Advisors, a subsidiary of First Chicago Corp., managed $828 million in international equity and $1.37 billion in international fixed-income accounts for U.S. tax-exempt clients as of March 31.

The international equity assets were committed most heavily to the United Kingdom, 16%; Germany, 11%; France, 5%; Japan, 35%; and Canada, 8%.

As of the same date, it had $4 million in global equity and $112 million in global fixed-income accounts.

The global equity assets were committed most heavily to the United Kingdom, 9%; Germany, 6%; Japan, 21%; Canada, 5%; and the United States, 36%.

The firm had $632 million in commingled accounts.

The firm actively manages core international equity and fixed-income portfolios. It uses internally developed valuation models, risk systems and other quantitative techniques in a structured decision process. The equity approach is value-oriented and identifies mispriced markets and securities. Fixed income is treated as a separate asset class, with interest rate and currency forecasts integrated into strategic forecasts.

Analysts or portfolio managers are in Chicago, Tokyo and London.

The firm reported a $108 million net gain in U.S. institutional tax-exempt business in the year ended March 31 for international and global accounts.

The firm has non-U.S. currency hedging capability.

Gary P. Brinson, president and chief investment officer, is chief executive officer; Rodney G.D. Smith, vice president and international product manager, is client contact.

### Grantham Mayo Van Otterloo & Co. International

40 Rowes Wharf, Boston, Mass. 02110; (617) 330-7523

| | |
|---|---|
| Total assets managed | $1,981,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $1,981,000,000 |
| International | $1,981,000,000 |
| U.S. tax-exempt clients | 33 |
| Minimum separate account | $5,000,000 |

Grantham Mayo Van Otterloo & Co. International managed $1.981 billion in international equity accounts for U.S. tax-exempt clients as of March 31.

The assets were committed most heavily to the United Kingdom, 33%; Germany, 10%; Netherlands, 8%; Sweden, 8%; and Spain, 9%.

The firm had $1.47 billion in commingled accounts and $12 million in mutual funds.

It uses quantitative analytical screening techniques to achieve low-beta foreign equity exposure with a low p/e profile. Portfolio turnover averages less than 20% annually.

Analysts or portfolio managers are in Boston and London.

The firm reported a $74 million net gain in U.S. institutional tax-exempt business in the year ended March 31 for international accounts.

The firm has been registered with the SEC since 1977.

Eyk Van Otterloo, partner, is client contact.

### G.T. Capital Management

50 California St. 27th Floor, San Francisco, Calif. 94111; (415) 392-6181

| | |
|---|---|
| Total assets managed | $900,000,000 |


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INTERNATIONAL

U.S. tax-exempt assets managed:
Total ..... $636,000,000
International ..... $613,000,000
Global ..... $15,000,000
U.S. tax-exempt clients ..... 10
Minimum separate account ..... $10,000,000

G.T. Capital Management Inc., a subsidiary of G.T. Management PLC, managed $613 million in international equity accounts for U.S.tax-exempt clients as of March 31.

The international assets were committed most heavily to the United Kingdom, 13%; Germany, 7%; Japan, 40%; Singapore, 6%; and Thailand, 6%.

As of the same date, it had $15 million in global equity accounts.

The global assets were committed most heavily to the United Kingdom, 6%; Japan, 29%; Hong Kong, 5%; Singapore, 4%; and the United States, 39%.

The firm had $6 million in commingled accounts.

It takes a global approach to identifying investment opportunities. It seeks early identification of major international trends and looks for the most appropriate countries and companies through which to exploit them. The approach seeks growth companies with undiscounted earnings acceleration.

Analysts or portfolio managers are in San Francisco, London, Hong Kong, Tokyo and Sydney.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1974.

Robert J. Boyd is chief executive officer; Mary Lou Bernhoft is client contact.

### Hill Samuel/Investment Advisers Ltd.

1100 Dain Tower P.O. Box 357, Minneapolis, Minn. 55440; (612) 371-7780

Total assets managed ..... $250,000,000
U.S. tax-exempt assets managed:
Total ..... $228,000,000
International ..... $225,000,000
Global ..... $3,000,000
U.S. tax-exempt clients ..... 4
Minimum separate account ..... $10,000,000

Hill Samuel/Investment Advisers Ltd., a subsidiary of Hill Samuel Group PLC/TSB Group PLC, managed $225 million in international equity accounts for U.S. tax-exempt clients as of March 31.

The international equity assets were committed most heavily to the United Kingdom, 22%; Germany, 15%; Japan, 20%; Australia, 10%; and Hong Kong, 10%.

As of the same date, it had $3 million in global fixed-income accounts.

The firm had $12 million in commingled accounts and $12 million in mutual funds.

The firm takes a quantitative approach to value investing through a structured and disciplined process. The approach aims for a consistent appraisal of all markets, securities and currencies; consistent above-average performance; and less volatility than the index during declining markets.

Analysts or portfolio managers are in London.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1982.

David G. Tilles, chief investment officer, is chief executive officer; Anne F. Holloran is client contact.

### IDS International Inc.

IDS Tower 10, Minneapolis, Minn. 55440; (612) 372-1335

Total assets managed ..... $1,119,000,000
Non-U.S. pension assets ..... $228,000,000
U.S. tax-exempt assets managed:
Total ..... $566,000,000
International ..... $448,000,000
Global ..... $118,000,000
U.S. tax-exempt clients ..... 22
Minimum separate account ..... $15,000,000

IDS International Inc., a subsidiary of IDS Financial Corp., managed $448 million in international equity accounts for U.S. tax-exempt clients as of March 31.

The international assets were committed most heavily to the United Kingdom, 12%; Switzerland, 6%; Netherlands, 2%; Japan, 56%; and Australia, 4%.

As of the same date, it had $118 million in global equity accounts, committed most heavily to the United Kingdom 8%; Switzerland, 5%; Japan, 45%; Australia, 5%; and the United States, 23%.

The firm had $64 million in commingled accounts.

It takes a top-down, bottom-up investment approach. Based upon a macroeconomic, geopolitical overview, assets are allocated among stocks, bonds and cash; currency views are taken; and countries are distributed into economic categories and weighted. Stock selection is based on fundamental analysis.

Analysts or portfolio managers are in Minneapolis and London.

The firm reported a $99 million net gain in U.S. institutional tax-exempt business in the year ended March 31 for international and global accounts.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1981.

The chief executive officer is Peter

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510 Locust Street, St. Louis, MO 63101

L. Lamaison, chief investment officer. The client contacts are Robert W. Edgar (Midwest); Gabrielle F. Shear (Eastern); and Diane K. Vener (Western).

### Kemper-Murray Johnstone International Inc.

120 S. LaSalle St., Chicago, Ill. 60603; (312) 845-1934

| | |
|---|---|
| Total assets managed | $680,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $498,000,000 |
| International | $498,000,000 |
| U.S. tax-exempt clients | 33 |
| Minimum separate account | $5,000,000 |

Kemper-Murray Johnstone International Inc., a joint venture between Kemper Financial Services and Murray Johnstone Ltd., managed $123 million in international equity and $375 million in international fixed-income accounts for U.S. tax-exempt clients as of March 31.

The equity assets were committed most heavily to the United Kingdom, 22%; Germany, 5%; Switzerland, 6%; Japan, 39%; and Australia, 7%.

The firm had $8 million in commingled accounts.

The firm is an active manager in market, security and currency selection. Macroeconomic evaluation leads to country allocation. Within country markets, securities are chosen using a long-term, value-oriented approach. The firm uses both fundamental and technical forecasts in currency management.

Analysts or portfolio managers are in Chicago and Glasgow.

The firm reported a $125 million net gain in U.S. institutional tax-exempt business in the year ended March 31 for international accounts.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1980.

Gordon Wilson, president, is chief executive officer; Sue Mullin is client contact.

Consultants: Oct. 17.

### Lombard Odier Holdings

Norfolk House, 13 Southampton Place, London WC1A 2AJ U.K.; 011-44-1-831-2350

| | |
|---|---|
| Total assets managed | $3,017,000,000 |
| Non-U.S. pension assets | $2,799,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $217,000,000 |
| International | $160,000,000 |
| Global | $57,000,000 |
| U.S. tax-exempt clients | 4 |
| Minimum separate account | $10,000,000 |

Lombard Odier Holdings (UK) Ltd., a subsidiary of Lombard Odier & Cie, managed $38 million in international equity and $122 million in international fixed-income accounts for U.S. tax-exempt clients as of March 31.

The equity assets were committed most heavily to the United Kingdom, 12%; Netherlands, 5%; Spain, 4%; Japan, 51%; and Singapore, 5%.

As of the same date, it had $57 million in global equity accounts, committed most heavily to the United Kingdom, 18%; Netherlands, 5%; Japan, 27%; Singapore, 4%; and the United States, 32%.

The firm uses a macroeconomic approach to regional allocation of assets. Portfolio managers/analysts implement the equity allocation within their geographic regions. The fixed-income team has an interest rate anticipation approach. Currency hedging, if applicable, is used for return enhancement.

Analysts or portfolio managers are in London, Geneva, Amsterdam and Montreal.

The firm reported a $47 million net gain in U.S. institutional tax-exempt business in the year ended March 31 for international and global accounts.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1978.

Robert van Maasdijk is chief executive officer; Karin Bonding is client contact.

### Massachusetts Financial Services Co.

200 Berkeley St., Boston, Mass. 02116; (617) 423-3500

| | |
|---|---|
| Total assets managed | $22,879,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $2,992,000,000 |
| Global | $175,000,000 |
| U.S. tax-exempt clients | 20 |
| Minimum separate account | $20,000,000 |

Massachusetts Financial Services Co., a subsidiary of Sun Life Assurance Co. of Canada (U.S.), managed $175 million in global fixed-income accounts for U.S. tax-exempt clients as of March 31, of which $57 million was in mutual funds.

The firm applies active fixed-income management techniques and uses hedging to segment non-dollar fixed-income investments into three components: currency return, bond price fluctuation and current income. It isolates the factors that will provide the most attractive total return.

Analysts or portfolio managers are in Boston.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1933.

Richard B. Bailey, chairman, is chief executive officer; William H. Lynch and James H. Kelly Jr. are client contacts.

### Mellon-Pictet International Management Ltd.

Cutlers Gardens, 5 Devonshire Square, London EC2M 4LD U.K.; 011-44-1-283-7471

| | |
|---|---|
| Total assets managed | $1,073,000,000 |
| Non-U.S. pension assets | $7,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $611,000,000 |
| International | $611,000,000 |
| U.S. tax-exempt clients | 18 |

Mellon-Pictet International Management Ltd., a subsidiary of Mellon Bank and Pictet & Cie, managed $611 million in international equity accounts for U.S. tax-exempt clients as of March 31.

The assets were committed most heavily to the United Kingdom, 21%; France, 5%; Spain, 8%; Japan, 23%; and Hong Kong, 7%.

The firm had $18 million in commingled accounts.

The investment approach is fundamentally driven active management of concentrated portfolios, tailored to client risk tolerances.

Analysts or portfolio managers are in London, Geneva and Tokyo.

The firm reported a $48 million net loss in U.S. institutional tax-exempt business for international accounts in the year ended March 31.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1980.

Dan H. Blanks, president, is chief executive officer. Rod Hearn is client contact in London; Steven Albrecht is the client contact in Boston at (617) 238-1529.

### J.P. Morgan Investment Management Inc.

83 Pall Mall, London SW1 Y5ES U.K.; 011-44-1-930-9444

| | |
|---|---|
| Total assets managed | $54,741,000,000 |
| Non-U.S. pension assets | $429,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $2,726,000,000 |
| International | $2,436,000,000 |
| Global | $290,000,000 |
| U.S. tax-exempt clients | 37 |

J.P. Morgan Investment Management Inc., a subsidiary of J.P. Morgan & Co. Inc., managed $1.743 billion in international equity and $693 million in international fixed-income accounts for U.S. tax-exempt clients as of March 31.

The international equity assets were committed most heavily to the United Kingdom, 16%; Germany, 11%; France, 4%; Spain, 4%; and Japan, 48%.

As of the same date, it had $26 million in global equity and $264 million in global fixed-income accounts.

The global equity assets were committed most heavily to the United Kingdom, 9%; Germany, 7%; France, 3%; Japan, 37%; and the United States, 28%.

The firm had $878 million in commingled accounts.

The firm actively manages asset mix, currency exposure and individual security selection to maximize total re-

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JB&CoB

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turn and minimize risk in U.S. dollars through a well-defined decision-making process.

Analysts or portfolio managers are stationed in New York, London, Tokyo and Singapore.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1984.

C. Nicholas Potter, president, is chief executive officer. Adrian F. Lee, vice president, is client contact in London; Anthony P. Wilson, vice president, is client contact in New York at (212) 837-1421.

### Morgan Grenfell Investment Services Ltd.

46 New Broad St., London EC2M 1NB U.K.; 011-44-1-256-7500

| | |
|---|---|
| Total assets managed | $3,148,000,000 |
| Non-U.S. pension assets | $403,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $2,684,000,000 |
| International | $2,275,000,000 |
| Global | $409,000,000 |
| U.S. tax-exempt clients | 48 |
| Minimum separate account | $15,000,000 |

Morgan Grenfell Investment Services Ltd., a subsidiary of Morgan Grenfell Asset Management Ltd., managed $2.231 billion in international equity and $44 million in international fixed-income accounts for U.S. tax-exempt clients as of March 31.

The international equity assets were committed most heavily to the United Kingdom, 16%; Germany, 4%; France, 3%; Switzerland, 4%; and Japan, 51%.

As of the same date, it had $211 million in global equity and $198 million in global fixed-income accounts.

The global equity assets were committed most heavily to the United Kingdom, 9%; Switzerland, 3%; Spain, 3%; Japan, 37%; and the United States, 23%.

At March 31, the firm had $108 million in commingled accounts.

The firm is an active global manager whose equity approach places equal emphasis on market decision and stock selection. No investments are made without considering the currency impact. Its fixed-income approach actively manages currencies, bond markets and maturities. Currency and bond market exposure decisions are separated through currency hedging.

Analysts or portfolio managers are in New York, London, Tokyo, Geneva, Sydney and Singapore.

The firm reported a $199 million net loss in U.S. institutional tax-exempt business in the year ended March 31 for international and global accounts.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1977.

Michael Bullock, chairman, is chief executive officer; James E. Minnick, executive vice president of Morgan Grenfell Capital Management, is client contact in New York at (212) 230-2600.

### Nomura Capital Management

180 Maiden Lane Suite 2903, New York, N.Y. 10038; (212) 509-8181

| | |
|---|---|
| Total assets managed | $2,199,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $1,141,000,000 |
| International | $1,130,000,000 |
| Global | $11,000,000 |
| U.S. tax-exempt clients | 13 |
| Minimum separate account | $5,000,000 |

Nomura Capital Management Inc., a subsidiary of Nomura Investment Management Co. Ltd., managed $1.13 billion in international equity accounts for U.S. tax-exempt clients as of March 31.

The assets were committed most heavily to the United Kingdom, 13%; Germany, 6%; France, 3%; Japan, 52%; and Australia, 4%.

As of the same date, it had $11 million in global equity accounts, which were committed most heavily to the United Kingdom, 10%; Germany, 5%; Japan, 34%; Australia, 3%; and the United States, 26%.

The firm concentrates investments in high-return sectors and stocks screened through original fundamental research and relative valuation. Emphasis is on sector and stock selection, with less emphasis on timing markets and currencies.

Analysts or portfolio managers are in New York, Tokyo and London.

The firm reported a $165 million net gain in U.S. institutional tax-exempt business in the year ended March 31 for international and global accounts.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1976.

Takeo Nakamura, president, is chief executive officer; Brian X. Fitzgibbon, senior vice president, is client contact.

### Oechsle International Advisors

1 International Place, Boston, Mass. 02110; (617) 330-8817

| | |
|---|---|
| Total assets managed | $760,000,000 |
| Non-U.S. pension assets | $17,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $743,000,000 |
| International | $743,000,000 |
| U.S. tax-exempt clients | 24 |
| Minimum separate account | $10,000,000 |

Oechsle International Advisors managed $743 million in international equity accounts for U.S. tax-exempt clients as of March 31.

The assets were committed most heavily to the United Kingdom, 12%; Germany, 8%; Japan, 26%; Canada, 11%; and Singapore/Malaysia, 6%.

The firm's approach emphasizes bottom-up stock selection, aggressive top-down country allocation and a value orientation. The investment horizon is 18 to 24 months; portfolios are constructed with a limited number of holdings; and investments are managed in a minimum of eight and a maximum of 12 markets.

Analysts or portfolio managers are in Boston, London and Tokyo.

The firm reported a $256 million net gain in U.S. institutional tax-exempt business for international accounts in the year ended March 31.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1986.

Walter Oechsle, managing partner, is chief executive officer; Stephen P. Langer is client contact.

### PCM International

745 Broad St., 2 Plaza, Newark, N.J. 07101; (201) 877-4559

| | |
|---|---|
| Total assets managed | $4,396,000,000 |
| Non-U.S. pension assets | $36,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $885,000,000 |
| International | $418,000,000 |
| Global | $567,000,000 |
| U.S. tax-exempt clients | 44 |
| Minimum separate account | $10,000,000 |

PCM International, a subsidiary of Prudential Insurance Co. of America, managed $226 million in international equity and $192 million in international fixed-income accounts for U.S. tax-exempt clients as of March 31.

The equity assets were committed most heavily to the United Kingdom, 7%; Germany, 8%; Spain, 5%; Japan, 53%; and Canada, 14%.

As of the same date, it had $567 million in global fixed-income accounts.

The firm had $672 million in commingled accounts.

Its equity approach is based on bottom-up stock selection, with defensive currency/stock market overlay. Its fixed-income approach employs active currency/maturity management using top-quality issues.

Analysts or portfolio managers are in Newark, N.J.

The firm reported a $183 million net gain in U.S. institutional tax-exempt business for international and global accounts in the year ended March 31.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1984.

Barry M. Gillman is chief executive officer; J. Eric Nelson, director, is client contact.

### Posthorn Global Asset Management

375 Park Ave., New York, N.Y. 10022; (212) 415-0802

| | |
|---|---|
| Total assets managed | $2,285,000,000 |
| Non-U.S. pension assets | $51,000,000 |
| U.S. tax-exempt assets managed: | |


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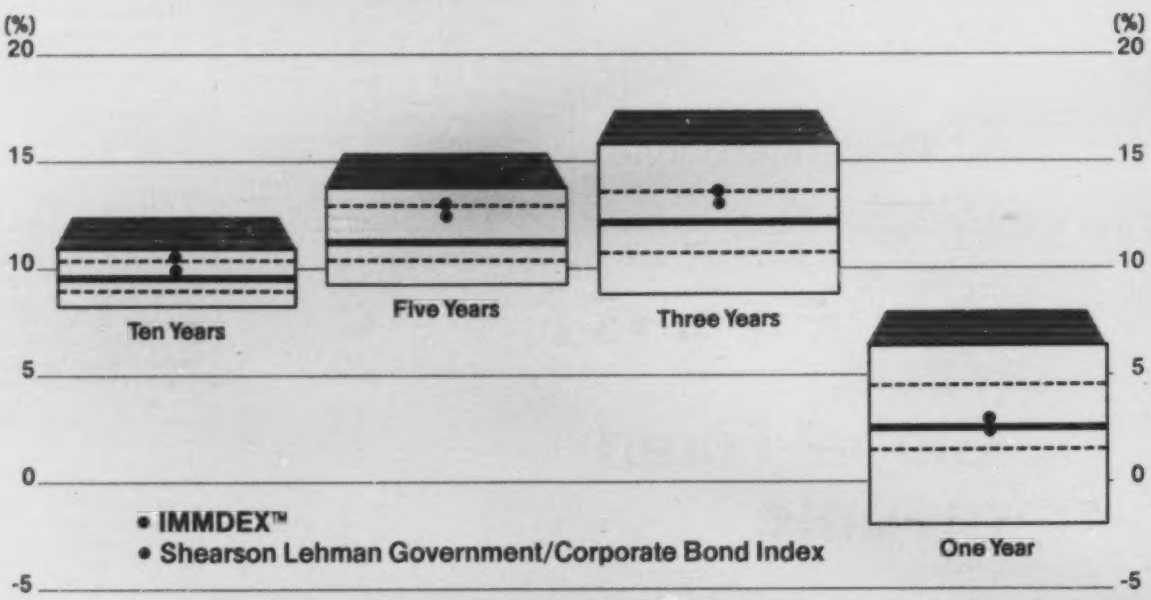


Bond fund total rates of return for periods ended December 31, 1987. Source SEI.

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FIRST WISCONSIN TRUST COMPANY

| | |
|---|---|
| Total | $872,000,000 |
| International | $396,000,000 |
| Global | $276,000,000 |
| U.S. tax-exempt clients | 16 |
| Minimum separate account | $15,000,000 |

Posthorn Global Asset Management, a subsidiary of Shearson Lehman Hutton Inc., managed $366 million in international equity and $30 million in international fixed-income accounts for U.S. tax-exempt clients as of March 31.

The equity assets were committed most heavily to the United Kingdom, 13%; Spain, 6%; Japan, 31%; Hong Kong, 4%; and Canada, 9%.

As of the same date, it had $109 million in global equity and $167 million in global fixed-income accounts.

The global equity assets were committed most heavily to the United Kingdom, 9%; Spain, 6%; Japan, 23%; Singapore/Malaysia, 6%; and the United States, 23%.

The firm had $475 million in mutual funds and $143 million in index funds.

The firm identifies global investment themes and then uses valuation screens to select attractively priced companies benefiting from the themes.

Analysts or portfolio managers are stationed in London.

The firm reported a $362 million net gain in U.S. institutional tax-exempt business for international and global accounts in the year ended March 31.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1984.

Karl R. Van Horn, chairman, is chief executive officer; Susan Leader, director-marketing, is client contact.


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Securities


## Rowe Price-Fleming International Inc.

100 E. Pratt St., Baltimore, Md. 21202; (301) 547-2140

| | |
|---|---|
| Total assets managed | $2,606,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $2,057,000,000 |
| International | $1,611,000,000 |
| Global | $446,000,000 |
| U.S. tax-exempt clients | 22 |
| Minimum separate account | $10,000,000 |

Rowe Price-Fleming International Inc., a subsidiary of T. Rowe Price Associates and The Fleming Group, managed $1.588 billion in international equity and $23 million in international fixed-income accounts for U.S. tax-exempt clients as of March 31.

The equity assets were committed most heavily to the United Kingdom, 33%; Switzerland, 6%; Netherlands, 7%; Japan, 28%; and Hong Kong, 7%.

As of the same date, it had $219 million in global equity and $227 million in global fixed-income accounts. The global equity assets were committed most heavily to the United Kingdom, 31%; Netherlands, 6%; Japan, 19%; Hong Kong, 6%; and the United States, 6%.

The firm had $189 million in commingled accounts and $549 million in mutual funds.

The firm is an active manager, using a top-down, bottom-up approach for equities. Large- and small-cap stocks are used. The fixed-income approach is fundamentally oriented using active management of credit markets and currency exposure.

Analysts or portfolio managers are in Baltimore, Bahrain, Frankfurt, New York, Paris, Hong Kong, Jakarta, Kuala Lumpur, Melbourne, London, Geneva, Manila, Seoul, Sydney, Taipei, Tokyo and Zurich.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1979.

M. David Testa, chairman, is chief executive officer; George A. Murnaghan is client contact.

## Putnam Advisory Co.

1 Post Office Square, Boston, Mass. 02109; (617) 292-1200

| | |
|---|---|
| Total assets managed | $8,813,000,000 |
| Non-U.S. pension assets | $71,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $7,514,000,000 |
| International | $239,000,000 |
| U.S. tax-exempt clients | 85 |
| Minimum separate account | $15,000,000 |

Putnam Advisory Co., a subsidiary of Putnam Cos. Inc., managed $190 million in international equity and $49 million in international fixed-income accounts for U.S. tax-exempt clients as of March 31.

The equity assets were committed most heavily to the United Kingdom, 16%; Germany, 6%; France, 5%; Netherlands, 5%; and Japan, 38%.

Of the assets invested abroad, $46.5 million were in commingled accounts.

Its equity approach uses qualitative judgment with quantitative techniques to combine a top-down and bottom-up approach, adding value through market and stock selection. Its fixed-income approach combines top-down fundamental research with quantitative techniques for making strategic and tactical bond and currency decisions.

Analysts or portfolio managers are in Boston, London and Tokyo.

The firm reported a $57 million net loss in U.S. institutional tax-exempt business for international accounts in the year ended March 31.

The firm has non-U.S. currency hedging capability and is registered with the SEC.

Lawrence J. Lasser, president, is chief executive officer; Orie L. Dudly is client contact.

## N.M. Rothschild International Asset Management Ltd.

Five Arrows House, St. Swithins Lane, London EC4N 8NR U.K.; 011-44-1-634-2950

| | |
|---|---|
| Total assets managed | $3,276,000,000 |
| Non-U.S. pension assets | $517,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $1,221,000,000 |
| International | $1,162,000,000 |
| Global | $59,000,000 |
| U.S. tax-exempt clients | 12 |
| Minimum separate account | $10,000,000 |

N.M. Rothschild International Asset Management Ltd., a subsidiary of N.M. Rothschild Asset Management (Holdings) Ltd., managed $536 million in international equity and $626 million in international fixed-income accounts for U.S. tax-exempt clients as of March 31.

The equity assets were committed most heavily to the United Kingdom, 19%; Germany, 6%; France, 4%; Japan, 38%; and Canada, 5%.

As of the same date, it had $59 million in global equity accounts, committed most heavily to the United Kingdom, 12%; Germany, 4%; Japan, 25%; Canada, 5%; and the United States, 32%.

The firm is an active top-down asset allocator. Through a process of fundamental economic analysis, assets are concentrated in markets expected to outperform. Currency allocation is decided separately and currency hedging is used extensively.

Analysts or portfolio managers are in London, Tokyo, Hong Kong, Sydney, Melbourne, Paris and Zurich.

The firm reported a $120 million net gain in U.S. institutional tax-exempt business for international and global accounts in the year ended March 31.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1980.

Richard Katz is chief executive officer; Peter Flynn is the client contact in New York at (212) 757-6000.


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Tel.: (212) 832-1630


## Frank Russell Trust Co.

1201 Pacific Ave., Tacoma, Wash. 98402; (206) 272-4097

| | |
|---|---|
| Total assets managed | $3,400,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $3,400,000,000 |
| International | $349,000,000 |
| U.S. tax-exempt clients | 170 |
| Minimum separate account | $5,000,000 |

Frank Russell Trust Co., a subsidiary of Frank Russell Co., managed $349 million in commingled international equity accounts for U.S. tax-exempt clients as of March 31.

The assets were committed most heavily to the United Kingdom, 17%; Germany, 7%; Netherlands, 5%; Australia, 6%; Japan, 35%; and Hong Kong, 5%.

The firm uses a multimanager approach, diversifying by manager style. It offers three international funds using seven advisers. Because it does not directly manage the assets, its figures are not included in the survey's aggregate data.

The firm reported a $25 million net gain in U.S. institutional tax-exempt business for international accounts in the year ended March 31.

Paul R. Kaltinick is president and chief executive officer; Virginia P. Sirusas, senior vice president, is client contact at (212) 486-7744.

## SBC Portfolio Management International Inc.

1 World Trade Center Suite 9051, New York, N.Y. 10048; (212) 938-7465

| | |
|---|---|
| Total assets managed | $400,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $251,000,000 |
| International | $236,000,000 |
| Global | $13,000,000 |
| U.S. tax-exempt clients | 14 |
| Minimum separate account | $5,000,000 |

SBC Portfolio Management International Inc., a subsidiary of Swiss Bank Corp., managed $205 million in international equity and $31 million in international fixed-income accounts for U.S. tax-exempt clients as of March 31.

The equity assets were committed most heavily to the United Kingdom, 8%; Germany, 7%; Switzerland, 6%, Netherlands, 5%; and Japan, 38%.

As of the same date, it had $13 million in global equity accounts, committed most heavily to the United Kingdom, 5%; Germany, 4%; Switzerland, 3%; Japan, 20%; and the United States, 35%.

The firm structures its top-down philosophy, process and allocation of resources with an emphasis on country selection. Strong bets against the EAFE index are protected by aggressive currency hedging where appropriate. Stock selection uses value screens and favors small-capitalization stocks where market liquidity permits.

Analysts or portfolio managers are in the United States, United Kingdom, Switzerland, Japan, Hong Kong, Singapore and Australia.

The firm reported a $135 million net gain in U.S. institutional tax-exempt business in the year ended March 31 for international and global accounts.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1982.

Peter J. Morant is chief executive officer; John W. Conlin is client contact.

## Schroder Capital Management International

787 Seventh Ave., New York, N.Y. 10019; (212) 841-3830

| | |
|---|---|
| Total assets managed | $2,200,000,000 |
| Non-U.S. pension assets | $300,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $1,736,000,000 |
| International | $1,600,000,000 |
| Global | $136,000,000 |
| U.S. tax-exempt clients | 34 |
| Minimum separate account | $15,000,000 |

Schroder Capital Management International, a subsidiary of Schroders PLC, invested $1.6 billion in international equity accounts for U.S. tax-exempt clients as of March 31.

The assets were committed most heavily to the United Kingdom, 14%; Germany, 6%; France, 5%; Switzerland, 8%; and Japan, 46%.

As of the same date, it had $136 million in global equity, committed most heavily to the United Kingdom, 8%; Switzerland, 8%; Netherlands, 6%; Japan, 22%; and the United States, 31%.

The firm had $60 million in commingled accounts and $614 million in mutual funds.

Its investment process begins with

country allocation, emphasizing stock selection in the countries with the best economic prospects, based on two-year economic projections. After country guidelines are established, an active, aggressive approach to stock selection is employed, focusing on emerging growth stocks as the core of the portfolio.

Analysts or portfolio managers are in London, New York, Tokyo, Hong Kong, Singapore, Zurich and Sydney.

The firm reported a net gain of $330 million in institutional tax-exempt business for international and global accounts in the year ended March 31.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1979.

David M. Salisbury is chief executive officer; Sharon L. Haugh is client contact.

### Walter Scott International

626 Wilshire Blvd., Suite 410, Los Angeles, Calif. 90017; (213) 623-2800

| | |
|---|---|
| Total assets managed | $237,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $237,000,000 |
| International | $217,000,000 |
| Global | $20,000,000 |
| U.S. tax-exempt clients | 5 |
| Minimum separate account | $10,000,000 |

Walter Scott International, a subsidiary of Walter Scott & Partners, managed $217 million in international equity accounts for U.S. tax-exempt clients as of March 31.

The assets were committed most heavily to the United Kingdom, 9%; France, 4%; Netherlands, 6%; Japan, 64%; and Hong Kong, 11%.

As of the same date, it had $20 million in global equity accounts, committed most heavily to the United Kingdom, 4%; Sweden, 2%; Japan, 24%; Hong Kong, 8%; and the United States, 58%.

The firm had $45 million in commingled accounts.

The firm's objective is to provide a 6% real rate of return. Portfolios are structured by identifying the top quartile of world growth sectors and owning companies with internal growth rates of more than 20%. Geographic allocation is a result of the identification process.

Analysts or portfolio managers are in Edinburgh.

The firm reported a $50 million net gain in U.S. institutional tax-exempt business in the year ended March 31 for international and global accounts.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1985.

Walter G. Scott is chief executive officer; Richard Miller is client contact.

### Scudder, Stevens & Clark

345 Park Ave., New York, N.Y. 10154; (212) 326-6200

| | |
|---|---|
| Total assets managed | $38,435,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $11,052,000,000 |
| International | $492,000,000 |
| Global | $73,000,000 |
| U.S. tax-exempt clients | 625 |
| Minimum separate account | $10,000,000 |

Scudder, Stevens & Clark managed $492 million in international equity accounts for U.S. tax-exempt clients as of March 31.

The assets were committed most heavily to the United Kingdom, 14%; France, 12%; Switzerland, 8%; Netherlands, 8%; and Japan, 26%.

As of the same date, it had $65 million in global equity and $8 million in global balanced accounts.

The global equity assets were committed most heavily to the United Kingdom, 14%; Switzerland, 6%; Netherlands, 6%; Canada, 8%; and the United States, 43%.

The firm had $310 million in mutual funds.

The investment approach is both top-down and bottom-up. Assessments of the global economy and local market and currency factors meshed with in-depth security analysis.

Analysts or portfolio managers are in New York, Boston and Tokyo.

The firm reported a $75 million net gain in U.S. institutional tax-exempt business in the year ended March 31 for international and global accounts.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1943.

Nicholas Bratt, managing director, is chief executive officer; Victoria J. Herget, principal, is client contact in Chicago at (312) 861-2700.

### State Street Bank and Trust

225 Franklin St., Boston, Mass. 02110; (617) 786-3000

| | |
|---|---|
| Total assets managed | $32,700,000,000 |
| Non-U.S. pension assets | $912,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $29,000,000,000 |
| International | $3,753,000,000 |
| Global | $278,000,000 |
| U.S. tax-exempt clients | 200 |
| Minimum separate account | $10,000,000 |

State Street Bank and Trust Co., a subsidiary of State Street Boston Corp., managed $3.753 billion in international equity accounts for U.S. tax-exempt clients as of March 31.

The assets were committed most heavily to the United Kingdom, 13%; Germany, 4%; France, 3%; Switzerland, 2%; and Japan, 64%.

As of the same date, it had $278 million in global equity accounts, committed most heavily to the United Kingdom, 9%; Germany, 3%; Japan, 43%; Canada, 3%; and the United States, 30%.

The firm had $1.459 billion in commingled accounts and $3.686 billion in index funds.

The firm concentrates on disciplined, quantitative strategies, including EAFE and other international index funds; country selection funds that actively weight the EAFE country allocations; and a high value stock selection strategy driven by low price/book values. Customized portfolios and an international bond fund also are offered

Analysts or portfolio managers are in Boston.

The firm reported a $452 million net gain in U.S. institutional tax-exempt business for international and global accounts in the year ended March 31.

The firm has non-U.S. currency hedging capability.

Nicholas A. Lopardo is chief executive officer; Peter E. Braun is client contact at (617) 654-3953.

### Strategic Investment Partners

2000 K St. N.W., Washington, D.C. 20006; (202) 785-2300

| | |
|---|---|
| Total assets managed | $2,600,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $2,600,000,000 |
| Global | $2,600,000,000 |
| U.S. tax-exempt clients | 3 |
| Minimum separate account | $50,000,000 |

Strategic Investment Partners managed $1.369 billion in global equity and $838 million in global fixed-income accounts as of March 31.

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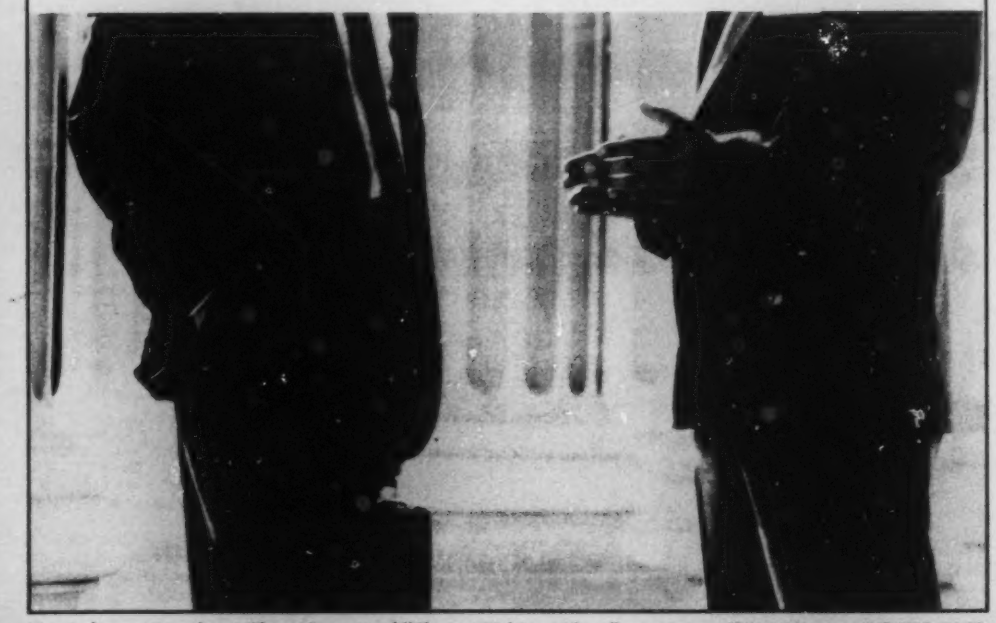

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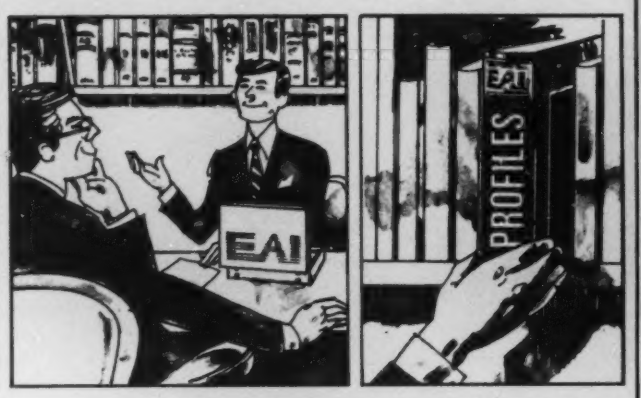


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200 Connecticut Avenue, Norwalk, CT 06854 (203) 855-2200

Because all of the assets are managed by external managers, its figures are not included in the survey's aggregate data.

The global equity assets were committed most heavily to the United States, 34%; United Kingdom, 3%; Japan, 2%; Germany, 2%; and Australia, 1%.

The firm had $84 million in index funds.

The firm is an active manager of total fund assets, taking responsibility for design and day-to-day implementation of investment policy and for investment returns.

The firm reported a $2.5 billion net gain in U.S. institutional tax-exempt business for global accounts in the year ended March 31.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1987.

Hilda M. Ochoa is chief executive officer; Mary Choksi is client contact.

### Templeton International

500 E. Broward Blvd. 2100, Fort Lauderdale, Fla. 33391; (305) 764-7390

| | |
|---|---|
| Total assets managed | $2,400,000,000 |
| Non-U.S. pension assets | $95,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $2,076,000,000 |
| Global | $2,076,000,000 |
| U.S. tax-exempt clients | 46 |
| Minimum separate account | $10,000,000 |

Templeton International, a subsidiary of Templeton Galbraith & Hansberger, managed $2 billion in global equity and $76 million in global fixed-income accounts as of March 31.

The equity assets were committed most heavily to the United Kingdom, 9%; Australia, 11%; Hong Kong, 6%; Canada, 8%; and the United States, 36%.

The investment approach is stock selection oriented and is based on value orientation, flexibility, global perspective and discipline.

Analysts or portfolio managers are in Nassau, London, Hong Kong and Fort Lauderdale.

The firm has been registered with the SEC since 1979.

Tom Hansberger is chief executive officer; Brett Blyler is client contact.

### Warburg Investment Management International

787 Seventh Ave., New York, N.Y. 10019; (212) 459-7150

| | |
|---|---|
| Total assets managed | $1,785,000,000 |
| Non-U.S. pension assets | $303,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $1,324,000,000 |
| International | $791,000,000 |
| Global | $533,000,000 |
| U.S. tax-exempt clients | 28 |
| Minimum separate account | $10,000,000 |

Warburg Investment Management International Ltd., a subsidiary of Mercury Asset Management Group PLC, managed $565 million in international equity and $226 million in international fixed-income accounts for U.S. tax-exempt clients as of March 31.

The equity assets were committed most heavily to the United Kingdom, 8%; Germany, 4%; France, 3%; Switzerland, 4%; and Japan, 29%.

As of the same date, it had $390 million in global equity and $143 million in global fixed-income accounts.

The global equity assets were committed most heavily to the United Kingdom, 5%; Germany, 3%; Switzerland, 3%; Japan, 19%; Canada, 3%; and the United States, 17%.

The firm had $10 million in commingled accounts.

The firm actively manages funds based on fundamental global research. Equity management combines top-down and bottom-up fundamental approaches with stocks analyzed against criteria including earnings growth, management and product strength. Fixed-income management is top-down with currency and bond investment decisions taken separately.

Analysts or portfolio managers are in New York, London, Tokyo and Melbourne.

The firm reported a $414 million net gain in U.S. institutional tax-exempt business for international and global accounts in the year ended March 31.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1976.

Robert P.B. Michaelson, chairman, is chief executive officer. Colin Clark, assistant director, is client contact for equity accounts; Carolyn Sykes, director, is client contact for fixed-income accounts.

### Wellington International Investors

28 State St., Boston, Mass. 02109; (617) 227-9500

| | |
|---|---|
| Total assets managed | $30,467,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $9,026,000,000 |
| International | $245,000,000 |
| U.S. tax-exempt clients | 191 |
| Minimum separate account | $10,000,000 |

Wellington International Investors, the international division of Wellington Management Co./Thorndike, Doran, Paine & Lewis, managed $240 million in international equity and $5 million in international fixed-income accounts for U.S. tax-exempt clients as of March 31.

The equity assets were committed most heavily to the United Kingdom, 7%; Germany, 8%; France, 7%; Switzerland, 7%; and Japan, 41%.

There was $109 million in commingled accounts.

Stock selection is based on detailed fundamental analysis by its internal research staff. It offers separate and commingled accounts, including international established growth stock, international emerging company stock, Pacific Basin, global equity and international bond investing.

Analysts or portfolio managers are in Atlanta, Boston, Valley Forge, Washington and London.

The firm reported a $67 million net gain in U.S. institutional tax-exempt business for international accounts in the year ended March 31.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1960.

Robert W. Doran is chief executive officer; Dena G. Willmore, senior vice president, is client contact.

### Wells Fargo Investment Advisors

50 California St., San Francisco, Calif. 94111; (415) 434-6000

| | |
|---|---|
| Total assets managed | $56,000,000,000 |
| Non-U.S. pension assets | $773,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $55,307,000,000 |
| International | $850,000,000 |
| Global | $121,000,000 |
| U.S. tax-exempt clients | 238 |
| Minimum separate account | $100,000,000 |

Wells Fargo Investment Advisors, a subsidiary of Wells Fargo & Co., managed $850 million in international equity accounts for U.S. tax-exempt clients as of March 31.

The assets were committed most

PFC. FFM

# KfW 1987
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In 1987 KfW succeeded once more in reaching its goal for the year and at the same time strengthened its potential for future development. Domestic investment loans were concentrated in two areas: small and medium-sized enterprises (DM 5.0 billion) and environmental protection (DM 2.1 billion). German exporters benefited from total credits of DM 3.2 billion. Development assistance funds appropriated by the Federal Government (DM 2.7 billion) were mainly used to finance projects in Africa and Asia, including for the first time structural aid to improve the macro-economic framework.

In the coming years KfW will see a considerable increase in domestic investment loans – not least as a result of the DM 21 billion financial programme for local authorities and small and medium-sized enterprises launched recently by the Federal Government.

A copy of KfW's 1987 Annual Report is available upon request.

KfW Kreditanstalt für Wiederaufbau

P. O. Box 111141
D-6000 Frankfurt am Main 1
Federal Republic of Germany

heavily to the United Kingdom, 17%; Germany, 8%; France, 5%; Switzerland, 4%; and Japan, 52%.

As of the same date, it had $121 million in global equity accounts, committed most heavily to the United Kingdom, 9%; Germany, 3%; France, 2%; Japan, 45%; and the United States, 33%.

All international and global assets were in commingled index funds.

The firm's international index funds are designed to replicate the performance of the world's capital markets. It has the capability to accurately replicate the EAFE, the Goldman Sachs FTA Europe & Pacific, the Salomon Russell PMI Europe-Pacific Composite and the Salomon Brothers World Government bond index.

Analysts or portfolio managers are stationed in San Francisco.

The firm reported a $291 million net gain in U.S. institutional tax-exempt business in the year ended March 31.

The firm has non-U.S. currency hedging capability and has been registered with the SEC since 1985.

Frederick L.A. Grauer, chairman, is chief executive officer; Michael L. Henman, senior vice president, is client contact.

### Wertheim-Philippe International

230 Park Ave., New York, N.Y. 10169; (212) 370-6140

| | |
|---|---|
| Total assets managed | $601,000,000 |
| Non-U.S. pension assets | $452,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $171,000,000 |
| Global | $171,000,000 |
| U.S. tax-exempt clients | 3 |
| Minimum separate account | $10,000,000 |

Wertheim-Philippe International, a joint venture between Wertheim Asset Management Services Inc. and the Philippe Group, managed $171 million in global equity accounts for U.S. tax-exempt clients as of March 31.

The assets were committed most heavily to the United Kingdom, 15%; Germany, 10%; France, 11%; Japan, 21%; and the United States, 14%.

The investment style incorporates both top-down and bottom-up methodologies. Equal weight is placed on country, sector and stock decisions. It is active in country and sector decisions and moderate in use of cash equivalents. Portfolios are diversified with approximately 100 securities. Generally, one-third of the holdings are in smaller-cap issues and 30% to 40% are not in the representative indexes.

Analysts or portfolio managers are in New York, Paris and Luxembourg.

The firm reported a $28 million net gain in U.S. institutional tax-exempt business for global accounts in the year ended March 31.

The firm has been registered with the SEC since 1982.

Beatrice Philippe, managing director, is chief executive officer; Steven W. Golann is client contact.

### WorldInvest Ltd.

55-56 Russell Square, London WC1B 4HP U.K.; 011-44-1-637-3322

| | |
|---|---|
| Total assets managed | $2,354,000,000 |
| Non-U.S. pension assets | $148,000,000 |
| U.S. tax-exempt assets managed: | |
| Total | $1,424,000,000 |
| International | $689,000,000 |
| Global | $735,000,000 |
| U.S. tax-exempt clients | 20 |
| Minimum separate account | $10,000,000 |

WorldInvest Ltd., a subsidiary of WorldInvest (Holdings) Ltd., managed $172 million in international equity and $517 million in international fixed-income accounts for U.S. tax-exempt clients as of March 31.

The equity assets were committed most heavily to the United Kingdom, 25%; France, 11%; Spain, 26%; Netherlands, 6%; and Hong Kong, 6%.

As of the same date, it had $104 million in global equity and $631 million in global fixed-income accounts.

The global equity assets were committed most heavily to the United Kingdom, 19%; France, 7%; Spain, 18%; Hong Kong, 7%; and the United States, 28%.

The firm had $98 million in commingled accounts.

The firm follows a three-step process. Objectives and risk/return parameters are mutually agreed upon. It practices active, discretionary management, with a top-down, disciplined team approach. Consensus expectations, reflected in market valuations, are assessed and compared to in-house analysis, with prospective risk/return profiles developed from alternative scenarios. Its global strategy uses common assumptions for fixed and equity that are collectively agreed upon and implemented. Sector and market currency decisions are assessed separately.

Analysts or portfolio managers are in London.

The firm reported a $330 million net gain in U.S. institutional tax-exempt business for global and international accounts in the year ended March 31.

The firm has non-U.S. currency hedging capability and is registered with the SEC.

Keith Brown, chairman, is chief executive officer; Francois Dennery, director, is client contact at (212) 755-0900.

### Top 50 managers ranked by total U.S. tax-exempt assets in international accounts as of March 31

| | ($ millions) |
|---|---|
| State Street Bank | 3,753 |
| Capital Guardian | 2,458 |
| J.P. Morgan | 2,436 |
| Morgan Grenfell | 2,275 |
| First Chicago | 2,198 |
| Grantham Mayo | 1,981 |
| Baring International | 1,902 |
| Rowe Price-Fleming | 1,611 |
| Schroder Capital | 1,600 |
| Fidelity International | 1,550 |
| N.M. Rothschild | 1,162 |
| Nomura Capital | 1,130 |
| Batterymarch | 1,016 |
| Wells Fargo | 850 |
| Warburg Investment | 791 |
| Oechsle International | 743 |
| WorldInvest | 689 |
| Brown Brothers Harriman | 631 |
| G.T. Capital | 613 |
| Mellon-Pictet | 611 |
| Citicorp Investment | 601 |
| Alliance Capital | 578 |
| Kemper-Murray Johnstone | 498 |
| Julius Baer | 496 |
| Scudder, Stevens & Clark | 492 |
| Daiwa International | 481 |
| Bankers Trust | 460 |
| IDS International | 448 |
| PCM International | 418 |
| Posthorn Global | 396 |
| ABD International | 343 |
| Arnhold & S. Bleichroeder | 320 |
| Capital Mgmt. International | 261 |
| Chase Investors | 250 |
| Wellington International | 245 |
| Putnam Advisory | 239 |
| SbC Portfolio Mgmt. | 236 |
| Hill Samuel/Invest. Advisers | 225 |
| American National Bank | 221 |
| Walter Scott | 217 |
| Bessemer Group* | 190 |
| Boston International | 181 |
| Boston Co. | 167 |
| Lombard Odier | 160 |
| Martin Currie | 135 |
| Fiduciary Trust* | 116 |
| Beutel, Goodman | 0 |
| Massachusetts Financial | 0 |
| Templeton International | 0 |
| Wertheim-Philippe | 0 |
| **TOTAL** | **38,374** |

* As of Dec. 31, 1987

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# Swiss ID regulation causes furor

By John Parry

GENEVA, Switzerland — A new law requiring fiduciary companies to identify their clients to the government is causing an uproar among the secretive Swiss.

The law, effective July 1, requires fiduciaries buying stocks or opening bank accounts to disclose for whom they are acting. Previously, the fiduciary simply had to say it was acting on a customer's behalf.

Executives at Swiss fiduciary companies believe the government has been strong-armed by the U.S. Securities and Exchange Commission, which pushed for the law as part of its efforts to collect information on insider-trading activities.

Swiss bankers insist the law will not mean an end to Switzerland's system of numbered bank accounts. But it is designed to prevent investors from taking unfair advantage of banking secrecy here to play markets illegally elsewhere, according to President and Finance Minister Otto Stich. (Under the Swiss system, each cabinet minister serves a year as president.)

But industry officials fear the legislation is but a hole in the dike of Switzerland's secrecy laws.

Anton Keller, president, of the Swiss Investors Protection Association, Zurich, said the changes will lead to loss of business for Swiss companies. The association fought strongly against the legislation.

"What this new legislation effectively does is to make it less interesting for foreigners, and particularly institutional investors, to put their money in Switzerland because there's always the risk that information will be passed on by our authorities to the SEC," Mr. Keller said.

"This will mean that business which would normally come to Switzerland would divert to Austria and Luxembourg, which are not compelled to provide such information to foreign regulators. We are giving up our traditional bank secrecy for no good reason, just because the Americans tell us to."

An executive at one Geneva-based fiduciary company, who asked not to be identified, expects business to drop drastically if and when U.S. authorities start interpreting the law as being a license to ask for more information on investments in Switzerland.

"Of course, maybe we are crying wolf, but there is now a distinct route for the SEC or other authorities to go if they want people like ourselves to reveal who we are working for," the executive said.

"Our own business is not concerned with individual clients but corporations and other major investors who want to conduct complicated transactions through Switzerland involving the movement of millions of dollars into and out of bonds and securities through Europe. The great charm of our operation before was that this could be done anonymously. Now, the question remains, can it still?"

Rene Ruchat, head of Fiduciare Ruchat, a small Geneva fiduciary company, said the law killed plans to develop a foreign clientele for money management services. "We thought we could build up a solid foreign business. I can't see this happening now," he said.

Faith Ryan Whittlesey, U.S. ambassador to Switzerland, takes a different view. The U.S. government pressed for an agreement, signed in November, relating to the prosecution of insider-trading cases to avoid protracted court battles, Ms. Whittlesey said in a speech earlier this month. There is no hidden intent to break into Swiss banking secrecy, she added.

The main thrust of the agreement and the new Swiss law is to enable the Swiss to provide quick information on cases such as the laundering of money in the Iran-contra scandal, she said.

Swiss authorities reacted with alacrity to U.S. requests for information in that case, suspending bank secrecy to release information on numbered accounts.

Swiss banks acquiesced because they were convinced the U.S. government had a case, but might not be so ready to do so again, said Daniel Menoud, a financial analyst at Banque Cantonale Genevois, Geneva. This led to the Swiss government's rush to implement the legislation by July 1, instead of this fall as originally planned.

While the new legislation might raise some problems for institutional investors, another problem might be coming to a head.

Opponents of a trend among major Swiss companies to restrict the sale of more than 2% of their registered shares to any one shareholder (*Pensions & Investment Age*, May 30) have come up with a powerful ally — Markus Lusser, president of the Swiss National Bank, Bern, Switzerland's central bank.

"I have an uneasy feeling that this trend is limiting the liquidity of the markets," Mr. Lusser said at a recent press conference. His comments followed by two days similar criticism from the Association of Foreign Banks, which said the process effectively blocks foreign investors from taking meaningful positions in Swiss industry.

Restricting foreign ownership is exactly what the process is supposed to do, according to Patrick Kearley, a Geneva-based freelance banking consultant. The process was initiated after World War II to prove Swiss ownership of companies whose foreign assets would have been confiscated by the Allies if the companies could be proved to be German-owned. Now, according to Mr. Kearley, about 75 major Swiss companies apply the practice, although opposition to it is increasing.

"I think the fact that the president of the national bank has come out against it is going to make some of those 75 think again," Mr. Kearley said. "A Swiss company thinks twice before it goes head-to-head with Markus Lusser." ■

# Hard to classify

*Continued from page 19*

as growth equity managers, he said, noting the style's definition isn't the same in the United States.

Some international firms with specialized styles have explored whether popular domestic styles can pay off overseas. Acadian Asset Management Inc., a new international manager in Boston, and Provident Capital Management, Philadelphia, which buys stocks with low price-earnings ratios, have back-tested the efficacy of a low p/e approach in international.

Acadian, which offers a small-cap product, found evidence of a positive small-cap performance effect in the major world markets with the principal exception of West Germany, according to Ronald Frashure, executive vice president. The firm also uses low price-book, a proprietary dividend discount model, specific return reversal (used by Barr Rosenberg in the U.S. market) and inputs on earnings estimate changes from the recently launched international version of the I/B/E/S service.

The best historic results in the period from the end of 1974 to the end of 1987 came from small-cap and value criteria used together, Mr. Frashure said.

Provident, on studies of 1,500 stocks in six major markets dating back to 1978, found that low p/e stocks provide superior international returns, according to Sandor Cseh, vice president. ■

**Top 15 managers ranked by total U.S. tax-exempt assets in international and global fixed income**

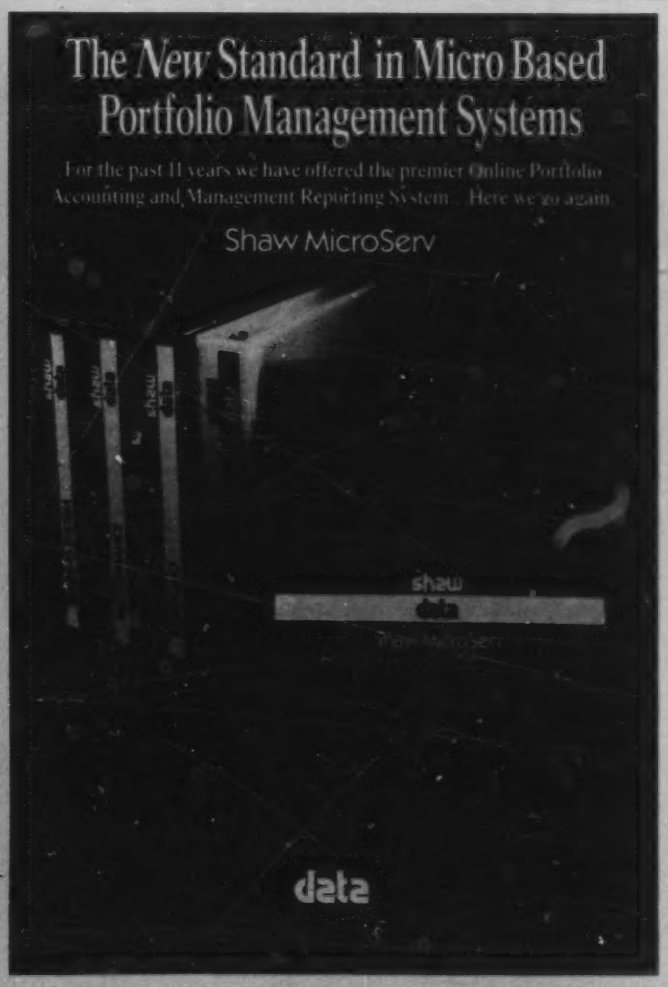
| | |
|---|---|
| First Chicago | 1,482 |
| WorldInvest | 1,148 |
| J.P. Morgan | 957 |
| PCM International | 759 |
| N.M. Rothschild | 626 |
| Julius Baer | 579 |
| Fiduciary Trust* | 469 |
| Baring International | 410 |
| Kemper-Murray Johnstone | 375 |
| Warburg Investment | 369 |
| Citicorp Investment | 333 |
| Bankers Trust | 294 |
| Rowe Price-Fleming | 250 |
| Morgan Grenfell | 242 |
| Beutel, Goodman | 241 |

* As of Dec. 31, 1987

**Top 50 managers ranked by total U.S. tax-exempt assets in global accountsas of March 31**

| | ($ millions) | | ($ millions) |
|---|---|---|---|
| Templeton International | 2,076 | N.M. Rothschild | 59 |
| Batterymarch | 944 | Lombard Odier | 57 |
| WorldInvest | 735 | Alliance Capital | 23 |
| PCM International | 567 | Walter Scott | 20 |
| Warburg Investment | 533 | ABD International | 16 |
| Rowe Price-Fleming | 446 | Brown Brothers Harriman | 15 |
| Fiduciary Trust* | 444 | G.T. Capital | 15 |
| Morgan Grenfell | 409 | SBC Portfolio Mgmt. | 13 |
| J.P. Morgan | 290 | Nomura Capital | 11 |
| State Street Bank | 278 | Hill Samuel/Investment Advisers | 3 |
| Posthorn Global | 276 | American National Bank | 0 |
| Fidelity International | 275 | Baring International | 0 |
| Capital Guardian | 243 | Bessemer Group* | 0 |
| Beutel, Goodman | 241 | Arnhold & S. Bleichroeder | 0 |
| Citicorp Investment | 205 | Boston Co. | 0 |
| Massachusetts Financial | 175 | Boston International | 0 |
| Wertheim-Philippe | 171 | Capital Mgmt. International | 0 |
| Bankers Trust | 147 | Chase Investors | 0 |
| Schroder Capital | 136 | Daiwa International | 0 |
| Martin Currie | 125 | Grantham Mayo Van Otterloo | 0 |
| Wells Fargo | 121 | Kemper-Murray Johnstone | 0 |
| IDS International | 118 | Mellon-Pictet | 0 |
| First Chicago | 116 | Oechsle International | 0 |
| Julius Baer | 114 | Putnam Advisory | 0 |
| Scudder, Stevens & Clark | 73 | Wellington International | 0 |
| | | TOTAL | 9,490 |

* As of Dec. 31, 1987




# Fixed income

*Continued from page 19*

International Ltd., each up 59%; and Oechsle International Advisors, with 51%.

Eight firms joined the top 50 and six left the ranking.

The newcomers are: American National Bank & Trust Co. of Chicago; Walter Scott International; Boston International Advisors Inc.; Massachusetts Financial Services Co.; Wertheim- Philippe International; and The Boston Co.. Also new on the list are Wells Fargo Investment Advisors and Beutel, Goodman International PLC, which were omitted inadvertently from last year's directory.

Dropping from the list are:

BEA Associates; Baillie Gifford Overseas; Ivory & Sime International; Centerre Trust Co. of St. Louis; Kleinwort Benson International Investment Ltd.; and Eaton Vance Management, which was listed as an international manager last year because of incorrect figures from the firm.

Ten firms slipped considerably in rank. Boston-based Fidelity International Investment Advisors Ltd.'s assets fell to $1.825 billion from $2.3 billion a year earlier, ranking the firm 11th vs. sixth. Last year's assets could have been overstated because Canadian accounts might have been included, said William Fink, senior vice president.

Other firms that fell more than five notches, their ranking this year and their previous ranking, include: ABD International Management Corp., to 33 from 17; Fiduciary Trust Co. International, to 30 from 19; Daiwa International Capital Management Corp., to 32 from 26; Hill Samuel/Investment Advisers Ltd., to 43 from 32; and The Bessemer Group Inc., to 46 from 40.

Assets of Frank Russell Trust Co. and Strategic Investment Partners are not included in the totals because the firms are managers of managers.

While there were few changes in the lineup of top international managers, managers made big gains in global accounts.

Templeton International stayed on top although its assets shrunk to $2.076 billion from $2.7 billion. Batterymarch Financial Management climbed to second place from 26th because many new and existing domestic accounts moved to global investing, including one existing account of $500 million. WorldInvest was third, increasing global assets 129%, followed by PCM International, which more than tripled its assets in global accounts. ■

# Social issues

*Continued from page 1*

Local Retirement Systems, Albany, and the General Board of Pensions, United Methodist Church, Evanston, Ill., sponsored a resolution asking Gillette to leave South Africa; it won 21.9% of the shares voted. The Los Angeles Unified School District sponsored a resolution asking Gillette to withdraw its operations and cut all other economic ties; 21.4% of shares were voted in favor of it.

A withdrawal resolution also was presented in 1987, winning 18% of shares voted then.

Support for withdrawal resolutions dropped significantly from 1987 totals at some companies, according to IRRC data. At Phelps Dodge Corp., support dropped to 9.4% from 22%; at Dresser Industries Inc., it fell to 11.6% from 20.9%; at Upjohn Co., it fell to 9.4% from 18%.

Corporate managements were pleased with these results, but stopped short of saying shareholder activism is losing ground.

"We would like to believe that this represents that a large number of our shareholders agree with the company's position," said Jessyl Bradford, public affairs associate at Upjohn. Management's position, is that it is better to maintain operations and work against apartheid from within South Africa than to withdraw, she said.

She added Upjohn is a signatory of the Statement of Principles, a non-discriminatory code of conduct for companies operating in South Africa.

On average, South Africa withdrawal resolutions were supported by 11.2% of the shares voted in 1988, compared with 12.2% last year. In addition to the companies in which support for such resolutions dropped significantly, there were a few where it rose a great deal — at Colgate-Palmolive Co., for instance, a resolution drew 17% of the vote, up from 10.2% — and several where it was basically unchanged.

An encouraging note for activist shareholders was the support for resolutions calling not only for withdrawal from South Africa, but severance of non-equity ties. While the latter approach is more drastic, these resolutions drew nearly as much shareholder support, 10.7%, as withdrawal-only resolutions, Ms. Mathiasen said.

Also, resolutions asking companies that do not have assets in South Africa to break other links drew support from an average of 11.7%, she said.

Activist shareholders found these developments heartening.

"There's been a shift," said Tim Smith, executive director of the Interfaith Center on Corporate Responsibility, New York, which sponsored numerous South Africa-related resolutions. "The issue is not just are you in South Africa, but who do you sell products to there and how are they used."

The top vote-getters among resolutions asking companies without direct investments in South Africa to cut other ties were at Emery Air Freight Corp., 19.3%; and Sundstrand Corp., 19.2%. The former was sponsored by the Interfaith Center, the latter by the Los Angeles school district.

Another notable South Africa vote was at CBI Industries Inc., where a resolution asking the company to sign the Statement of Principles won 23.6% of the shares voted.

Emery, Sundstrand and CBI all have a relatively small number of outstanding shares, making it easier for a few large investors to tip the vote, Ms. Mathiasen said.

Still, votes of this size lead companies to re-examine their positions, said Jon Lukomnik, spokesman for the New York City Employees' Retirement Systems, one of the sponsors of the CBI resolution. He said the city funds' policy is not to call for companies to withdraw from South Africa, but to run operations there in a manner that is both socially responsible and good for business.

One of the New York City funds, the Teachers' Retirement System, sponsored the top vote-getter among resolutions related to operations in Northern Ireland. The resolution, at Interface Inc., was supported by 22.8% of shares voted. It asked the company to endorse the MacBride Principles, a code of conduct aimed at ending religious discrimination in Northern Ireland.

To date, no U.S. company has endorsed the principles. Several have expressed the concern, as did Interface in its proxy material, that adhering to the code could constitute reverse discrimination and therefore violate British law.

Resolutions on Northern Ireland, submitted at 16 companies, won an average of 7.6% support, up from 6.2% among 10 proposals in 1987. Support for such resolutions fell slightly at most companies that had faced them previously, but the heavy support at Interface pushed the average up. Interface also has a small number of outstanding shares, Ms. Mathiasen said.

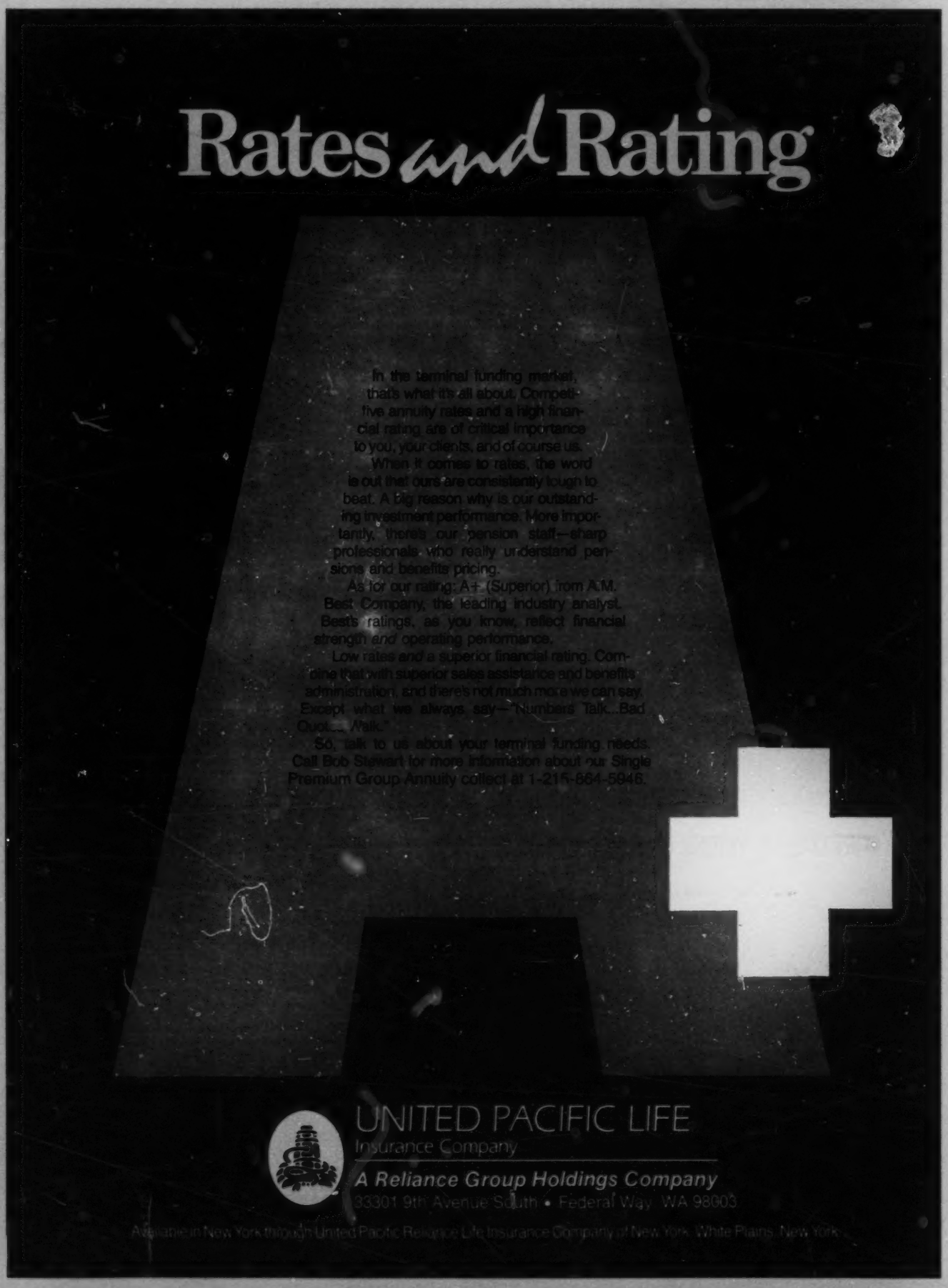
Mr. Lukomnik said shareholder activism on Northern Ireland is gaining ground after a small start.

Most of the Northern Ireland resolutions called for endorsement of the MacBride Principles or review of Northern Ireland operations; none called for withdrawal.

Other social issues prominent this year were military issues and animal testing. Of the 17 proposals on military issues, 10 are eligible for resubmission. All eight proposals on animal testing are eligible.

Most proposals on military issues asked for companies to submit plans for converting to non-military production, questioned whether they should lose their defense contracts, or report on their involvement with development of the Strategic Defense Initiative.

Seven of the animal testing resolutions asked for companies to report on progress toward phasing out such testing. The other asked for information on involvement with testing. ■

# Proxy battles spawn debate

By Marcia Parker

The 1988 proxy season is wrapped up, the results are in and the debate is on over whether shareholder opposition to poison pills is growing.

Proxy solicitors representing corporate clients and institutional investors who sponsored shareholder resolutions are quibbling over how to interpret the voting results on anti-poison pill resolutions at 19 companies, including 10 at companies whose shareholders voted on such proposals last year.

Institutional investors say shareholder support to rescind poison pills clearly is growing; companies say it's shrinking (*Pensions & Investment Age*, June 13).

According to Georgeson & Co., a leading New York proxy solicitation firm, for the 19 companies targeted with rescission proposals in 1988, an average of 26.4% of the outstanding shares voted in favor. In 1987, the 30 targeted companies averaged 20.8% of outstanding shares voted in favor.

Ten companies — United Technologies Corp., Upjohn Corp., Great Northern Nekoosa Corp., Pitney Bowes Inc., Emery Air Freight Corp., International Paper Co., Champion International Corp., AMR Corp., Santa Fe Southern Pacific Corp. and J.C. Penney Co. — were targeted with anti-poison pill resolutions both years.

But John Wilcox, managing director of Georgeson, said the voting statistics do not reveal a trend of growing shareholder support for the proposals.

"Increased institutional ownership and careful selection of target companies by the proponents, rather than increased shareholder support, appear to have been largely responsible for the higher average votes this year than last," he said. "The proponents targeted only 10 of the 30 companies that faced the same issue last year. By narrowing the selection process to those companies with the highest votes last year, the proponents ensured an increase in their average score of at least four percentage points."

Executives representing several institutional investors that sponsored anti-poison pill resolutions, including the California Public Employees' Retirement System, Sacramento, and the State of Wisconsin Investment Board, Madison, challenged Mr. Wilcox's assessment of the results.

"They are just trying to minimize any gains," said Jose Arau, principal investment officer for the California fund, one of the most activist institutional investors in the corporate governance field.

Peg O'Hara, director of corporate governance issues for the Investor Responsibility Research Center Inc., an independent Washington-based group, said she doesn't see "how anyone can deny that shareholder opposition to poison pills was higher this year than last year, as shown by the votes on these shareholder proposals. One proposal won a clear majority of the shares voted, another won a plurality; at seven companies, more than 40% of the shares voted supported the anti-poison pill resolutions, and across the board, no matter how you count the votes, the average vote was more than 9% higher than last year," Ms. O'Hara said.

"To say it was because of higher institutional ownership or more selective targeting of companies or to quibble over how the votes should be counted seems to me to beg the question. The point is that institutions do own a lot of shares in a lot of companies, and they have a right to vote their proxies. As fiduciaries, pension plans also have a legal responsibility to vote them solely in the best interest of the beneficiaries of their plans."

She said many institutional investors believe poison pills, greenmail and other anti-takeover measures are hurting the value of their stock, so they're speaking up in the only way open to them.

"They're raising the issue through shareholder proposals, which are purely advisory, not binding on the board of directors. They're using the process to try to draw attention to the issues, trying to get management to listen to their views," she said. "If an individual shareholder owned 30% or 50% or 70% of a company, I think most managements would go out of their way to communicate with him and respect his views. What these institutions are saying is, why should it be any different with them? They are, after all, the owners of the company."

The highest anti-poison pill vote in 1988 was at Santa Fe Southern Pacific, where 77 million shares were voted in favor of the rescission proposal — 40.1% of the shares outstanding or 59.1% of the shares voted on the issue. Mr. Wilcox, however, argued Santa Fe is an extraordinary situation. Two institutional investors — The Henley Group Inc., La Jolla, Calif., and Olympia & York Development Ltd., Toronto — together owned more than 35% of the outstanding shares on the record date. Presuming they voted their shares in favor of the proposal, only 28.9% of the remaining votes cast supported the proposal, less than the average, he said.

Georgeson said its analysis of the nine companies, excluding Santa Fe, that were targeted for proposals in both years, shows the vote in favor was actually 1.3 percentage points lower in 1988 than in 1987 — 23.2% of outstanding in 1988 vs. 24.5% of outstanding in 1987. This decline occurred despite increased efforts by the proponents and a 0.7 percentage point increase in institutional ownership of the nine companies.

The proxy firm said in both 1988 and 1987 the votes in favor of the proposals tended to correlate with the percentage of institutional ownership. ■

## Manager lures away fund chief

CHICAGO — Samuel W. Anderson is resigning as executive director of the $7 billion Teachers' Retirement System of the State of Illinois, Springfield, to become chief administrative officer and managing director of First Chicago Investment Advisors.

Mr. Anderson said he will officially start at First Chicago July 1.

He has been executive director of the teachers' system for eight years.

In his newly created position at First Chicago, he will head the firm's administration division, which consists of the account management, marketing systems, control and legal units. He will direct operations and head new business development.

Also at First Chicago, Denis S. Karnosky was promoted to managing director and head of the asset allocation division from vice president. He joined First Chicago in 1987 from the Chicago office of Carroll McEntee & McGinley Inc., New York, where he directed risk management research and development.

## Summary of voting results of 1988 shareholders

| | Georgeson: Votes cast with abstentions | Georgeson: Votes outstanding no abstentions | IRRC: Votes cast no abstentions |
|---|---|---|---|
| **Shareholder rights** | | | |
| Consolidated Freightways | 42.4 | 34.8 | 45.8 |
| Allied-Signal | 31.5 | 24.5 | 32.6 |
| Panhandle Eastern | 34.8 | 27.9 | 37.4 |
| Sonat | 27.8 | 20.5 | 31.3 |
| MCA | 21.7 | 17.5 | 26.3 |
| Kerr-McGee | 38.8 | 29.9 | 45.5 |
| USAir | 47.7 | 34.4 | 51.9 |
| Coleman | 35.4 | 25.8 | 35.7 |
| Dayton Hudson | 47.5 | 28.1 | 48.4 |
| United Technologies | 28.6 (28.3) | 23.7 (24.3) | 33.5 (32.9) |
| Great Northern Nekoosa | 43.7 (43.7) | 32.2 (28.6) | 47.0 (40.2) |
| Pitney Bowes | 28.8 (32.6) | 21.5 (23.9) | 32.5 (32.6) |
| Emery Air Freight | 38.7 (33.9) | 20.3 (26.0) | 39.3 (41.4) |
| International Paper | 25.7 (26.3) | 15.1 (18.7) | 27.0 (27.7) |
| Champion International | 23.6 (30.7) | 18.9 (19.9) | 28.2 (33.2) |
| Upjohn | 30.0 (34.5) | 21.1 (26.8) | 31.1 (40.0) |
| AMR | 40.5 (37.9) | 29.6 (27.4) | 45.9 (45.9) |
| Santa Fe Southern Pacific | 59.1 (20.1) | 49.1 (14.0) | 61.2 (20.1) |
| J.C. Penney | 32.7 (31.6) | 27.0 (25.3) | 35.2 (31.5) |
| **Confidential voting** | | | |
| Honeywell | 17.1 | 13.0 | 20.1 |
| Manufacturers Hanover | 9.9 | 8.2 | 13.1 |
| Champion Spark Plug | 7.3 | 5.7 | 7.3 |
| Phelps Dodge | 28.1 | 18.8 | 27.9 |
| Ryder Systems | 22.0 | 18.2 | 25.3 |
| Lockheed | 16.2 | 12.7 | 19.3 |
| American Home Products | 9.4 | 7.4 | 11.9 |
| Santa Fe Southern Pacific | 28.9 | 24.1 | 29.9 |
| Upjohn | 14.3 | 10.0 | 14.8 |
| **Equal access** | | | |
| Bank of Boston | 6.8 | 5.6 | 7.6 |
| Unocal | 11.0 | 8.9 | 11.6 |
| Amoco | 8.0 | 6.3 | 8.3 |
| Chevron | 6.8 | 4.9 | 7.1 |
| Texaco | NA | NA | NA |
| Mobil | NA | NA | 9.3 |
| **Anti-greenmail** | | | |
| CBS | 7.0 | 4.6 | 7.0 |
| General Motors | 19.4 | 14.3 | 22.1 |
| Tenneco | 19.2 | 15.5 | 28.2 |
| Gillette | 54.6 | 41.1 | 55.7 |
| J.C. Penney | 27.2 | 22.4 | 34.0 |

Numbers in parentheses indicate 1987 figures

# 'Hit list'

*Continued from page 1*

the Allied-Signal or Gillette letters or the target companies' proxy season activities as improper. The department will not comment, except to confirm monitoring is under way.

The Texaco case probably is on the monitoring list because the proxy battle was so hostile. In the end, Texaco shareholders supported management in the bitter contest with the company's largest stockholder, corporate raider Carl Icahn.

Personal appeals, newspaper ads and other tactics were used by both sides to win the support of institutional investors, investment managers and key stockholders.

Mr. Icahn has said institutional investors' votes were "bought" by Texaco's management. Texaco's chief executives promised institutional shareholders they would be more involved with the company in the post-proxy season and they might be allowed to nominate directors to the board.

At Allied-Signal, the company mounted a successful campaign to defeat a proposal sponsored by the State of Wisconsin Investment Board, Madison, that challenged the company's poison pill. Wisconsin's proposal was not approved, but did generate significant stockholder support. More than a dozen anti-poison pill resolutions were sponsored by institutional investors this year and overall support rose despite strong corporate efforts to defeat the proposals.

Edward Hennessy Jr., chairman and chief executive officer, wrote to chief executives whose pension funds own Allied-Signal stock, money managers owning company stock and other institutional shareholders, soliciting support for management's position.

Copies of the letters were filed with the Securities and Exchange Commission as proxy solicitation material — the first time any chief executive has done so. The SEC gave tacit approval to the three letters, which were tailored for particular recipients.

Colman Mockler, Gillette's chairman and chief executive officer, also wrote to fellow chief executives whose pension funds owned Gillette stock. In the letter, Mr. Mockler said he was writing to alert them of strategic block investing, "a new phenomenon, which I believe is a potentially serious danger to virtually all publicly owned U.S. companies."

After making a strong argument against strategic block investing (which occurs when an investment group, individual, company or corporate raider takes a significant equity stake in another company) Mr. Mockler cited Gillette and Coniston and asked the chief executives for their support.

"Your company, through its pension and other benefit plans, may hold stock in a number of companies that could be attacked by strategic block market players," Mr. Mockler wrote. "If you agree that the so-called strategic block phenomenon is not in the best interests of publicly owned companies, their stockholders and their other corporate constituents, including their plan participants, please make your views known in an appropriate way with due regard for the fiduciary obligations that may be involved. The next sound and successful American company to be forced to an untimely sale or break-up could be your own."

Other than Messrs. Hennessy and Mockler, no other chief executives are believed to have written similar letters this year.

Like the Gillette letter, Mr. Hennessy's letter stayed clear of any hint of pressure.

"If you agree that poison pills may help directors to preserve and maximize a corporation's value for all shareholders, I urge you to speak with your investment management people and ask them to consider the views expressed in this letter before deciding how to vote on the anti-poison pill proposal," Mr. Hennessy wrote.

"I am advised that in doing so, without any attempt to interfere with the delegated decision-making authority of your managers, you will not contravene the Department of Labor's widely circulated statement on proxy voting by plan fiduciaries."

A spokesman for Allied-Signal said company executives had not discussed the letter with the Labor Department, which isn't required, and he is not sure how department officials viewed the letter.

Investment managers, meanwhile, are scrambling to assemble the proxy voting records requested by the Labor Department. The department has identified investment managers that held large blocks of stock in the target companies on behalf of plans covered by the Employee Retirement Income Security Act. They were given 14 days from receipt of the Labor Department letter to provide the information. Most received the letter in early June. ■

# Hedged index

*Continued from page 2*

the impact on managers where hedging is not a normal part of their process," said Janice Harding, vice president of The Frank Russell Co., Tacoma, Wash.

While a manager who doesn't pay attention to currency theoretically should not mind if a client requests staying fully hedged, the manager might object if forced to sell securities to cover losses from the hedged position. Despite the risk reduction in hedging, "there's a practical consideration in hedging if the manager has to keep going to the sponsor to cover losses. No one likes to write out a check. It will make some sponsors very unhappy," Ms. Harding said.

Although currency gains are viewed as leveling over time, currency fluctuations produce short-term volatility that hedging substantially reduces.

The risk reduction more than offsets the higher correlation of hedged foreign assets with U.S. assets, barely affecting the gains, according to research by Salomon Brothers Inc. To accompany its new hedged foreign bond index, Salomon soon will launch a hedged version of the Salomon-Russell Global Indexes, hedging all 23 currencies in the index.

"At recent levels of exchange-rate volatility, hedging currency exposure greatly enhances the diversification potential of foreign investments . . . U.S. investors gain as much in risk reduction as they do by investing abroad, unhedged, in the first place," according to a study to be published in the Financial Analysts Journal by Andre F. Perold, associate professor of business administration of the Harvard Business School, and Evan C. Schulman, partner of Batterymarch: Canada and president of a new equity firm, MJT Advisors Inc., an affiliate of Mitchum, Jones and Templeton Inc., Los Angeles.

Transaction costs are low in the foreign exchange market, among the largest and most liquid markets. The cost of rolling over six-month forward contracts in major currencies is about 0.12% a year, according to the Perold/Schulman study.

Given its low cost and high benefits, some say hedging is underused. "Ironically, most global managers view currency risk as part of the risk of investing overseas," said Robert Arnott, president and chief investment officer of First Quadrant Corp., Morristown, N.J.

Without a strong belief that foreign currencies will rise against the dollar, "if you don't hedge currency risk, you're bearing a risk that provides no reward. That's inherently suboptimal," he said.

Mr. Arnott thinks by adopting a hedged benchmark, pension fund executives can encourage more hedging. "If the benchmark changes, you'll find the managers will, too."

But others don't think hedging into dollars should be a fund's normal strategy.

Jill Jordon, a partner with Matuschka Moser Partners, Greenwich, Conn., an international manager that offers active currency management and runs $700 million, said always being either fully hedged or unhedged is an overly naive solution to currency volatility.

Besides, "you can make lots of money in cross-trades (among non-dollar currencies) that you miss if you take a simplistic view," she said.

Most pension executives are not sold on the concept of being hedged as a neutral position, but many are examining their managers' hedging strategies. Some also might overlay currency management onto existing international portfolios, thereby treating currency as a separate asset class.

Susan Stannard, senior financial analyst of the $700 million Fluor Corp. pension fund, Irvine, Calif., which has $10 million in international equities, views currency and the underlying international equities as separate assets.

J.P. Morgan Investment Management Inc., London, the firm's international equity manager, generally doesn't hedge, and Ms. Stannard isn't taking steps toward a hedge policy yet because she doesn't see the dollar rising in the near future.

If the dollar rebounds, plan executives should look at their "break-even points," asking themselves "if international stocks have enough added value to justify bearing currency risk or even to justify a hedge back to the dollar," Ms. Stannard said. During the past three to four years, she noted, at least half of international stock gains have been from currency appreciation against the dollar.

The Common Fund encourages active currency bets, according to Mr. Tobey. "We're happy to have the underlying stock and bond exposure with an open currency position if (managers) feel the yen and pound will go up vs. the dollar. If they do not have an explicit decision, we'd like them to hedge back to dollars — but not necessarily fully" because there are dollar-linked currencies managers may hedge into as well, he said.

For international equities, the Common Fund uses the Morgan Stanley Capital International Europe Australia Far East index in local currency terms or the MSCI World index excluding the United States. The benchmarks are adjusted for hedging costs.

Some don't think fully hedged or sponsor-driven hedge policies will proliferate. Bobbie Parkhill, consulting manager at Ennis, Knupp & Associates, Chicago, said the firm's clients "typically don't make (the currency hedging) decision. . . . Yes, they're scared about the dollar, but I think that's why they have the manager. It's contrary to the idea of having managers if you tell them how to invest." ■

# Australian tax

*Continued from page 2*

Analysts said the increase is due to the overall impact of the budget, which lowers corporate income tax to 39% from 49%, and to inflationary pressures that favor Australia's commodity-rich economy, as well as the pension fund shift into domestic stocks.

The cut in the corporate tax rate "translates directly to the bottom line," said Jonathan Shack, client adviser at MacIntosh Hamston, a brokerage unit of Hoare Govett Ltd., London. The effect was to lower the average price-earnings ratio to 10 from 12, he said.

Other changes in the corporate tax structure include a lower-than-expected gold tax, an average cut of 22% in import tariffs, tax exemptions on dividends received by Australian companies (except for 60 designated tax havens) and elimination of accelerated depreciation schedules. Cuts in personal income tax will not be introduced until next year.

The pension changes also have abetted the market's rise, as pension funds bought up domestic equities — particularly into selected banking and industrial stocks paying fully franked dividends — in the wake of the mini-budget.

The new taxes also are expected to affect financing of Australian corporations, which might be pressed to raise their dividends to perhaps 6% a year from a historic average of 4.5%.

Some think the move into stocks providing fully franked dividends will be short-lived, especially given the shortage of such stocks.

"There will be a short-term obsession with imputation — people will end up paying a dollar to get a 20-cent tax saving," said Bruce Thomas, senior investment manager at Hambros Australia, Sydney.

"Strategies will change over time. A higher content of imputation stocks will emerge, and the more franked dividends the better, but you must question the value of the franked dividend.

"Some of the quality second-liners might be attractive — the banks have a low dividend payout. I still believe we have to look for the best overall growth — the franked dividends are less important than the capital gain."

Keith Trevallion, investment manager of PNC International Financial Services, Sydney, said the tax on earnings should be kept in perspective.

"It will be kept in balance, but at the end of the day they will pay some tax," he said.

Jean Brunel, director and general manager of J.P. Morgan Investment Management Australia, Melbourne, said the sudden move into stocks was inappropriate. "It's a knee-jerk reaction," he said. "Structuring a portfolio so that it pays no tax will mean a lesser return at an enormous risk."

The consulting firm of TPF&C, Sydney, warned its clients not to alter their risk profiles for tax reasons alone. Instead, the risk-reward ratio now must be determined on an after-tax basis.

Frank Russell's Mr. Ueland said the lessons of October, when Australian equities lost 40% of their value, should not be lost, and funds should stick with their investment objectives and tolerable levels of risk.

The minibudget is expected to hurt smaller money management firms, which will be hit with higher costs, and firms that have shunned equities since October and have missed the ride up the market. In addition, brokerage firms are expected to see lower trading value and increased demand for sophisticated services.

Benefiting from the changes are managers such as Melbourne-based ANZ Capital Markets Corp., which maintained the same equity weighting it had in October.

Also being helped are index fund managers, as pension funds seek to minimize turnover and thus taxes on realized capital gains.

"Index funds have something to gain," said Nick Basile, investment manager of MLC Asset Management Division, Sydney.

"Fully replicated index funds will do well. On the other hand, synthetic index funds, made up of futures which have no dividends, are a thing of the past as far as superannuation funds go." ■

*This story was compiled by the Australian Super Review, a monthly publication, and Foreign Editor Joel Chernoff.*

# Passive funds

*Continued from page 1*

since 1980.

Polaroid's strategy has changed recently on the fixed-income side. Earlier this year, it made its first move into fixed-income indexing, said Philip E. Ruddick, director-treasury operations. "We've been successful with indexing on equities, and we wonder if there is logic we can apply to fixed income."

Polaroid committed only $10 million to fixed-income indexing, leaving under active management the bulk of its fixed income, currently about half of the fund.

"We don't believe the entire fixed income should be indexed," he said. "On fixed income, we believe there is opportunity to get additional return without taking additional risk."

In equities, Polaroid plans to remained indexed, he added, a testimony to its pension committee's belief in the efficiency of the stock market and the expense of active equity management.

Mr. Ruddick said the strategy also underscores the importance Polaroid's pension committee places on asset allocation. Less time spent on manager searches and performance monitoring means more time to devote to asset allocation.

The entire fund, including equities and fixed income, returned 8.4% last year, he said. By contrast, the median return in a pension fund universe tracked by SEI Corp., Wayne, Pa., was 3.9%.

He attributes the result to reduction in equities before the October crash. He said the fund had gradually cut its equity allocation to 35% in September from a percentage in the 50s in January.

Since then, its equity mix has increased to 38% because of rising stock prices rather than an active allocation decision, he added.

"Basically over the long haul we believe you can't beat the (stock) market," Mr. Ruddick said. As a result, "we adopted a policy we call 'no leakage.' We don't want to pay a lot of management fees and commissions."

Eagle-Picher might be the only fund with more than $100 million in assets that is completely passive.

At a recent conference, Harry A. Neely, Eagle-Picher treasurer, termed the approach "a fairly different, almost perverted approach because it is almost entirely passive."

Its fund is evenly split between equities and fixed income. In contrast to Polaroid, Mr. Neely said the fund has kept the 50-50 split since the indexing began, rebalancing every quarter.

Mr. Neely estimates his fund saves 125 to 150 basis points annually in active management fees and commissions.

According to other pension industry executives, active equity management fees often range between 50 and 100 basis points annually; stock index funds typically charge less than 25 basis points. Index trading costs also are less because of lower turnover, lower commissions and little or no market execution impact on price.

In its move to index fixed-income assets, Polaroid hired Wells Fargo Investment Advisors, San Francisco, to run about $10 million in a Shearson Lehman Hutton Government/Corporate bond index fund, Mr. Ruddick said.

The bulk of its fixed income continues to be run actively by Merganser Capital Management Corp., also of Cambridge. Merganser, Polaroid's former in-house fixed-income investment management unit, had been the fund's sole fixed-income manager.

Polaroid's equities are divided about evenly among three passive managers, he said. Wells Fargo and Mellon Capital Management Corp., also of San Francisco, each runs Standard & Poor's 500 stock index funds; American National Bank & Trust Co. of Chicago runs an index fund of non-S&P 500 small stocks.

Mr. Ruddick said Polaroid was one of the early pension sponsors to use indexing, first in 1980 with Wells Fargo for the bulk of its equity allocation. During the next two years, the fund gradually moved the rest of its equities to indexing.

Eagle-Picher has 60% of its equities in-house, run in an equal-weighted Standard & Poor's 500 index fund. Unlike the traditional market capitalization-weighted index, the equal-weighted structure allows price moves by smaller stocks to influence the index as much as those by larger stocks.

"At the time, there was a feeling secondary stocks would do better," said Joshua E. Adams, Eagle-Picher assistant treasurer. He noted that historically, smaller stocks have performed better over the long term.

The equal-weighted approach also imposes a disciplined buy and sell process on the portfolio.

Mr. Neely said the equal-weighted portfolio has about kept up with the traditional S&P 500 index, although returns were unavailable.

The other 40% of its equities are with American National Bank in two index funds that emphasize smaller stocks.

The Cincinnati office of Scudder Stevens & Clark runs the fund's fixed income in a passively managed portfolio of laddered maturities. According to Mr. Neely, the portfolio consists of securities with maturities in each of the years from one to 10, with 10% of the fixed-income assets allocated to each maturity.

The idea is "so we average interest rates over time," Mr. Adams said. The portfolio is mainly composed of Treasury securities.

Mr. Neely said the cumulative return for the fund since the passive strategy began places it between the 25th and 35th percentile of Trust Universe Comparison Service pension fund universe. The return was unavailable.

From 1981 through 1987, the fund returned 13.9% compound-annualized.

Turner had $54.8 million of its assets in S&P 500 index funds March 31, all run by Wells Fargo, according to Lars Lofas, assistant to the senior vice president.

Its S&P index funds include $37.3 million in a static allocation. The other $17.5 million in S&P index funds comes from a $43.8 million asset allocation fund, also run by Wells Fargo. The manager allocates the $43.8 million in indexed equities, indexed fixed income and cash, as it perceives the market changing.

Mr. Lofas said Turner had 70% of its total fund allocated to equities through much of the bull market. Then about 18 months ago, the equity commitment was reduced to 65%. At the beginning of the year, Turner adjusted its asset allocation again, shifting 40% of its total fund to Wells Fargo's asset allocation fund, he added.

In absolute terms, equity indexing paid well in the 1980s.

According to Wilshire Associates, Santa Monica, Calif., the median active equity portfolio for the seven years ended Dec. 31 returned a compound annual 14.29%.

In the same period, the S&P 500 returned a compound annual 13.8% and a index of small stocks, 12.6%, according to Ibbotson Associates Inc., Chicago. ■

# Favia Hill shut

*Continued from page 3*

Favia, Hill was spun off in October 1983 with $9 billion under management, part of a trend of banks creating independent units. The idea was to instill them with entrepreneurial vigor, enabling them to attract and retain key personnel and regain market share.

But that didn't seem to happen.

"The bank had a lot of average, working-class managers," said one New York money manager. "Chemical decided all they had to do was repackage" its efforts, he added.

Those in charge didn't understand the investment management business, said a former employee. Spinning off the unit reflected "me-tooism" that was common within the industry, he added.

The naming of the firm after its two principals — in the hope of making it sound like an independent firm — also was viewed as a mistake by some. Less than two years after the unit was formed, Robert Hill left to join Pleasantville A&T Corp., New York, a private firm managing family endowment money. Jack Favia retired in April.

Meanwhile, the firm's equity performance sagged under its growth orientation that played on themes. While insiders said performance was weak before the spinoff, the market of the past five years has been tough on growth managers as a whole.

For the five-year period through 1987, Favia, Hill's composite account returned a compound annual rate of return of 13.3%, underperforming the 16.5% return for the Standard & Poor's 500 index, but exceeding the 12.6% return for the Lipper growth manager index.

Those numbers probably overstate Favia's overall performance, because the composite consists only of accounts managed by Mr. Rolland and other large accounts. Also, one of Favia's problems, Mr. Madden said, was dispersion of results among some of its portfolio managers, some of whose returns are not included in the composite.

In three years, the firm lost 50 tax-exempt clients, slipping to 117 on Jan. 1, 1987 from 167 Jan. 1, 1984. During that same period, tax-exempt assets under management dropped to $5.3 billion from $8.7 billion.

Among equity and balanced accounts reduced or lost during that period were Burroughs Corp. (now part of Unisys Corp.), the Los Angeles Fire & Police Pension System and the National Automatic Sprinkler Industry.

All was not well on the bond side, either. While performance was better, the firm lost more than $4 billion in assets from two New York City public funds, in part because of performance. Sources said Favia, Hill did well relative to other bond managers, but had made an interest-rate bet that went in the opposite direction of its normalized benchmark.

In late 1986, Managing Director Kenneth L. Dowd Jr. was brought in from the bank's trust and investment division to oversee development of Chemical's institutional investment management services.

Among other things, Mr. Dowd hired Mr. Madden in April 1987 to head marketing efforts for all of Chemical's money management units. Previously executive vice president at Fidelity Management Trust Co., Boston, and senior vice president of Chase Manhattan Bank, New York, Mr. Madden is known as an outstanding marketer.

Sources said too much weight was given to marketing and portfolio managers lost their voice in the firm's direction.

"Here, a lot of people wanted to run the business," Mr. Madden said. "But that's not what they're paid for. Their responsibility — with very little time to do it — is managing the portfolio."

By last fall, Chemical decided to focus Favia, Hill's attention on larger accounts, increasing client visits and raising fee schedules. In the process, the firm resigned up to 50 client relationships, representing up to 100 accounts but only $290 million in assets.

The increased fees also resulted in the loss of some clients, Mr. Madden said.

When Mr. Favia retired, efforts were made to replace him but no candidate was offered the job, Mr. Madden said. Another key equity portfolio manager, Terence Carmichael, also decided to leave, Mr. Madden noted.

Chemical officials, with the input of consultants and others, eventually decided to close the firm's doors.

Now, Chemical Investment Group will focus on building the rest of its business. "At this point, the name of the game is not to be the biggest, but to be a quality organization," Mr. Madden said.

The *P&I Age* monthly indexes track the changes in the Standard & Poor's 500, Frank Russell Co.'s Russell 3000 stock index, the Ryan Index of fixed-income securities, the Shearson Lehman Government/Corporate bond index and the Salomon Brothers Broad Investment Grade bond index.

**P&I Age May indexes**

| | Latest mo. | Year to-date | Trailing 12 mos. |
|---|---|---|---|
| S&P 500 | 0.61 | 7.64 | −6.63 |
| Russell 3000 | 0.40 | 9.42 | −6.27 |
| Ryan Index | −0.95 | 1.63 | 5.37 |
| Shearson Lehman Gov't./Corp. | −0.67 | 2.29 | 6.41 |
| Salomon BIG | −0.38 | 2.76 | 7.11 |

Source: Rogers, Casey and Barksdale Inc., and Frank Russell

# New waters

*Continued from page 3*

ment manager will plunge into eagerly, but one she hopes will have better fortune than the last of her 13 skydiving jumps, which resulted in a broken ankle, still on the mend.

The ankle, however, doesn't figure to slow her down. "If I start on July 1, I can be managing money by Aug. 1," she said.

As the firm grows, it will seek to offer top job opportunities to women and minorities, two groups she believes have not reaped a fair share of the fruits of the investment industry.

Ms. Marshall hopes to distinguish the firm in other ways, too: "I always said I never wanted to start another 'me-too' investment firm."

She plans to use investment systems she has developed through her stints as investment manager at the California fund; president of BayBank Trust Services, Boston; and director of investments at Deere & Co., Moline, Ill.

"I believe I can offer a superior investment system," she said. "The key will be a systematic discipline screen and valuation of securities," she said, including segmentation of the equities and bond markets into value, growth and large and small capitalizations.

Ms. Marshall said her firm will focus on reducing execution costs by making trading as efficient as possible, using a trading system designed to get the lowest possible transaction costs and through lower-than-normal management fees.

The trading system will use an "urgency code" to determine the best time to buy and sell particular stocks and bonds, she said. "It will be very attractive to the buyer and the seller who doesn't have to act immediately," she said.

At first, the system will be used to make the firm attractive to larger clients. "Once the systems are in place, the challenge will be to market to the smaller companies," she said. "That's the big underserved market."

Once Ms. Marshall's decision not to renew her contract with California became known, she received, and declined, job offers from across the country. "I want to try to piece this together," she said. "That was my first option. I like challenges."

Her years at California were marked by the fund's increased computerization, heavier use of international investments and involvement in corporate governance issues.

"I'm proudest of having put in a series of systems that will continue to operate after I'm gone," she said.

Her activist approach to shareholder involvement in corporate governance stood out during the fund's involvement with Texaco Inc. in its legal battle with Pennzoil Co., Texaco's subsequent bankruptcy proceedings and then its fight with corporate raider Carl Icahn.

"Texaco was one of the most disheartening experiences I had," she said.

Although the California employees' fund voted its 763,000 shares for management in Texaco's successful efforts against Mr. Icahn, Ms. Marshall called it "a choice between the lesser of two evils."

"I was appalled," she said. "Shareholders were badly served by everyone involved."

Despite her move to the other side of the desk, Ms. Marshall remains outspoken on a number of issues.

She opposes poison pills, supermajority rules, mergermania — "the majority (of mergers) do not create any real value" — and social restrictions on investment portfolios, such as the South Africa-free requirements soon to be imposed on the California fund through state law.

"I resent the fact that pension funds are supposed to be the major tool of social policy," she said. "It is far more damaging to lose sales than to lose shareholders. Shareholders will always be replaced."

She also is an outspoken supporter of program trading, which has been strongly criticized by some for contributing to the severity of October's market crash — a time when Ms. Marshall and the California fund quickly snatched up $40 million in stocks.

"The market crash was a reflection of a more efficient market," she said. "You want real values reflected as quickly as possible. Computerized trading is a good idea. Those who oppose it are the equivalents of the Luddites that broke the machinery."

(The Luddites were a group of English laborers who opposed the imposition of labor-saving — and hence, job- and wage-reducing — machinery in textile mills.)

The move back to private industry — not to mention a different function — will pose other challenges for Ms. Marshall.

"In the public sector, people get ahead by being different, standing out," she said. "In the private sector, people get ahead by being part of a team."

Although she hopes to distinguish her new firm, she recognizes her high profile in the California job will not guarantee success.

"This will not be a Lone Ranger operation," she said.

But with the computer age, it will be a long-distance operation. Ms. Marshall said she sees no reason her partners all need to be in the same office.

"In my opinion they should stay where they are. It almost doesn't matter where the firms are located," she said. "In a global economy, what's critical is the product you offer."

So while she hopes to have offices in Boston ("where the best systems and operations people are"), New York ("the financial center") and San Francisco (close to home), Ms. Marshall thinks the small firm will manage with her in contact with all points.

"I'll probably be up in an airplane," she said, laughing.

And, no doubt, hoping her jump into the money management field doesn't land her on that bad ankle. ■

# Index growth

*Continued from page 3*

and international indexed accounts.

"Plans are still taking their money out just because they feel they have too large an exposure in equities because of the increased valuations," he said. "We see asset allocation decisions instead of anti-indexing. Foreign (investment) is attractive because it is a young business, a lot of room for growth."

In general, money managers said pension executives are interested in international indexing as well as "enhanced," "tilted" and "customized" funds for both fixed-income and equity assets.

"We see a continued and probably growing interest in fixed-income products for several reasons," said Edward Swan, manager of the asset management group at WR Lazard & Co., New York. "We're beginning to see a lot of increased interest from institutional investors after they've looked at returns where active fixed-income managers have underperformed the market. Plan sponsors are seeing that specialized bond indexes can be developed to capture specific types of characteristics with less volatility and a high certainty of return.

"You combine that with the realization you can create a specific universe, and it's a very cost effective way to manage money."

"Increasingly, plan sponsors are interested in branching out beyond stereotypical index product," added Kirk Barnaby, vice president for Mitchell Hutchins Institutional Investors Inc., New York.

Brian Mattes, vice president for the Vanguard Group, Valley Forge, Pa., pointed out that, according to INDATA, Stamford, Conn., almost two-thirds of active managers underperformed the S&P in 1987. "You'd have to go back to 1982 for where the majority of equity managers outperformed the S&P," he said.

Mary Ellen Stanek, vice president for First Wisconsin Trust Co., Milwaukee, sees the growth in all forms of indexing as a natural progression.

"I think it's an evolution," said Ms. Stanek. "People who like the strategy are saying if active managers aren't beating the market, perhaps it's a better mousetrap. The wave of sponsors moving to enhanced vehicles isn't going to slow down."

One happy voice was that of Jon Victor, president of Security Capital Management Inc., Stamford, Conn., as his domestic fixed-income index funds grew $374 million — or 92% — since Jan. 1.

Mr. Victor said market uncertainties have limited new clients in the indexed portfolios offered by Security Capital: "I think the markets are continuing to be volatile. The bulk of the asset growth has been in contributions (from existing accounts)."

Mr. Hurley, of Investment Index Technologies, said he sees movement in the domestic equity side toward broader based indexes, such as the Wilshire 5000 and the Russell 2000, "simply because the small-cap stocks have been so robust," he said. "As soon as you get outside the S&P, you're moving to smaller cap firms."

Small-cap issues returned a 13.37% in the first quarter, according to the NASDAQ industrial index of over-the-counter stocks, while at the same time, the S&P 500 returned 5.7%.

Small-cap manager Dimensional Fund Advisors, Santa Monica, Calif., reported a 64% increase in indexed tax-exempt assets managed to $5 billion from $3.1 billion Nov. 30. David Booth, chairman, said the firm creates small-cap indexes to serve as benchmarks for its indexed funds. ■

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InvestmentAge

# Global assets will surge

By Marlene Givant

U.S. pension funds are expected to invest $1.3 trillion in international markets by the year 2000, 14 times the amount they have invested today, while their allocation to international investments should jump to at least 20% of assets from about 3% currently.

The growth should come both from large funds preparing to make their second wave of overseas investments and from public and smaller corporate funds with few, if any, current foreign investments.

(The percentage estimate was derived from interviews with pension executives and applied to a projection of $6.3 trillion in total pension assets from Rodger Smith, a partner at Greenwich Associates, Greenwich, Conn. Pension funds now have more than $2 trillion in total assets, of which $60 billion is invested abroad.)

In interviews, most pension executives agreed their international exposure will increase — probably to about 25% of total assets — but they differ on how that will happen.

Some say domestic investments will be globalized; others say their peers will make conscious decisions to raise their allocations to non-U.S. investments.

Said Keith E. Tucker, vice president of E.I. du Pont de Nemours & Co., Wilmington, Del., which has 10% of its $12 billion in pension assets invested abroad: "Foreign markets are much larger today as a percentage of the total market than they were 10 or even five years ago. We can no longer ignore that, and if we do, it's at our own peril."

The impact an increase in international investing would have on the U.S. capital markets, however, is not clear; the offsetting effect of foreign inflows is difficult to call.

"If you try to forecast (the net effect on) U.S. securities markets in a systematic fashion, you can't. . . . It leads to very misleading forecasts," said Peter L. Bernstein, president of Peter L. Bernstein Inc., New York, an economic consulting firm.

But the benefits of being diversified are reinforced by the fact that foreign markets recovered more quickly than the U.S. market from October's stock market crash and by the continuing globalization of financial markets.

However it happens, the spurt of growth has begun. For example, the internally managed $27 billion Teachers Insurance and Annuity Association-College Retirement Equities Fund, New York, is raising international exposure to 15% from 10%; Bell Atlantic Corp., Philadelphia, with $11.5 billion in pension assets, is believed to be approaching a long-term international target of 25%; and the $420 million fund of McGraw-Hill Inc., New York, soon might increase its foreign investments slightly from the 7% it now has in global equities.

Sherri Williamson, pension investment administrator of McGraw-Hill, said large funds will have to look overseas for good values because as institutions make up a bigger part of the U.S. equity market, there might not be enough attractive domestic stocks.

Another reason to diversify is the increasing size of

*Continued on page 53*

# Utility controls its contribution by asset shifts

By Curtis Vosti

HAMMOND, Ind. — Quick action on an asset/liability study last year allowed Northern Indiana Public Service Co. not only to lock in its gains from the bull market, but also to have a more stable level of contributions.

In part as a reaction to the balance sheet requirements of the Financial Accounting Standards Board's Statement 87, the study, done by the Chicago office of Goldman, Sachs & Co. Inc., prompted the Hammond-based utility a year ago to shift $114 million of its $300 million in assets to a bond portfolio with a duration of 12 years.

A recent follow-up study shows the company's shift from stocks has "locked in" equity gains from the five-year bull market; the new bond portfolio more than covers the duration of its liabilities; and contributions to the plan are relatively more stable at a slightly lower level than they would have been without the shift to fixed investments, according to Francis Girot, NIPSCO's manager of finance.

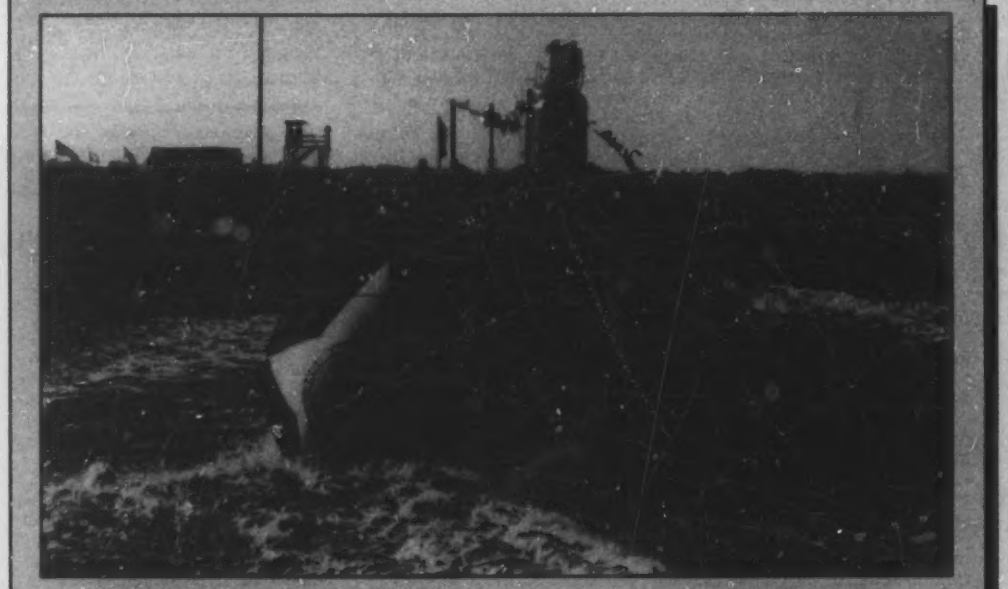
"The (Goldman) study showed that there would be volatility without the switch to bonds," Mr. Girot said. Though he declined to give details, Mr. Girot said "There was very substantial savings depending on what happened in the market.

"The approach we have now will reduce a lot of the volatility (in contributions) we faced with FASB," he said.

The imposition of pension liability balance sheet requirements by FASB 87 and the new limitation on deductions for overfunded plans have spurred many funds to do asset/liability studies.

Four years ago, Mr. Girot said, NIPSCO had a "substantially underfunded" plan, with only 60% of the assets needed to cover liabilities. At that time, the utility switched to a

*Continued on page 53*



General Dynamics Corp., which manufactures an array of military and commercial products, has trimmed the number of its plan's outside managers to 16 from 30 during the past few years.

# Trimming the team

## Large funds cutting manager rosters

By Nicky Robertshaw and Fred Williams

Some large pension funds, overloaded with money managers hired through the years, are beginning to cull their manager rosters.

The reductions are being achieved quietly and gradually, by allocating additional assets to existing managers, to index funds or to in-house management when money managers are dismissed.

In at least five companies, a total of 40 managers have been dropped since the mid-1980s.

Consultants, more than money managers and pension executives, believe the time for consolidation has come.

"The pendulum may have swung a little too far in terms of diversification, so that it's hard to make a case for replacing those managers," said Roger C. Bransford, national director-asset planning for TPF&C, Atlanta.

"This may be the front edge of a total examination by plan sponsors."

R.E. Shultz, vice president-pension asset management at RJR Nabisco Inc., Atlanta, said pension executives might be overdi-

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## LATE NEWS

### GAO report confirms findings

WASHINGTON — A General Accounting Office study confirms earlier research that most private pension plans had net increases at the end of 1987 despite the Oct. 19 crash.

In a study of 174 pension plans sponsored by 92 companies and unions to be released this week, 158 of them had declines during the fourth quarter. Of that group, all but four ended the year with more assets. It also found defined contribution plans tended to have more big winners and losers, since the values of these plan assets were tied more closely to the values of one particular stock.

The study will be the subject of hearings before the House Ways and Means subcommittee on oversight this week.

### 1-share, 1-vote rule wins kudos

WASHINGTON — Shareholder rights groups praised the one-share, one-vote rule passed Thursday by the Securities and Exchange Commission, but were critical of a grandfather clause for companies with unequal voting shares already in place.

"I think it's excellent, and it's in line with what the Council of Institutional Investors wanted," said Roland M. Machold, chairman of the executive committee of the council and director of the New Jersey Division of Investment, Trenton. With the grandfathering up to July 7, however, "there were quite a few horses that got out of the barn," he said.

Under the rule, a company that recapitalizes in such a way as to reduce the voting rights of holders of common stock cannot list its stock on the exchanges or NASDAQ.

### Keystone proposes settlement

DALLAS — Keystone Consolidated Industries Inc. has offered a $5.2 million settlement in a suit brought by pension plan participants in its National Lock division in Rockford, Ill.

The participants contended, and a federal judge agreed, Keystone executives breached their fiduciary duty under the Employee Retirement Income Security Act by investing the Keystone pension fund's assets in stock of Amalgamated Sugar Co., Ogden, Utah, in 1982 (*Pensions & Investment Age*, Aug. 19, 1985).

Even though the fund later sold the stock at a profit, the transactions were not made solely in the interest of participants and beneficiaries, the judge ruled; investor Harold Simmons, who controls Keystone, was seeking to block a merger between Amalgamated and another company so that one of his companies could acquire Amalgamated.

Keystone's settlement offer consists of $3.9 million to be paid to the pension trust in 39 monthly installments of $100,000 and $1.3 million to be paid in 13 monthly installments of $100,000 to reimburse the plaintiffs for legal fees and other expenses, said Ralph End, Keystone's corporation counsel.

Officials at the Washington law firm of Feder & Associates, which represented the plaintiffs, declined comment.

### Funds add investment managers

• JUNEAU, Alaska — The $9.6 billion Alaska Permanent Fund decided Friday to add four domestic equity managers.

IDS Equity Advisors, Minneapolis; Loomis, Sayles & Co. Inc., Pasadena, Calif.; Miller, Anderson & Sherrerd, Bala Cynwyd, Pa.; and United Capital Management, Denver, will join the fund's three current domestic stock managers.

The seven firms will get about equal portions of the $900 million the Alaska fund has in common stocks, but no decision as to the exact allocations has been made, according to James R. Wilson, chief investment manager.

• HOUSTON — The $460 million Houston Municipal Employees Retirement Fund has hired JMC Capital Management, Metairie, La., to run a $15 million equity portfolio.

The system also placed $5 million with existing manager Equitec Institutional Realty Advisers Inc., Oakland, Calif., according to Cliff Tuttle, executive director.

Mr. Tuttle said the system terminated Texas Commerce Investment Management Co., Houston, and Loomis, Sayles & Co. Inc., Boston, which had managed portfolios of about $23 million each. Allocation of the remaining $26 million will be determined during the next several weeks, he said.

## DEPARTMENTS


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Vol. 16, No. 15 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1988.

## Real estate survey out

Questionnaires for *Pensions & Investment Age*'s annual directory of real estate investment managers have been mailed out.

For your firm to be included in the Sept. 19 directory, please return the questionnaire by July 27 to Christine Philip, directory coordinator, *Pensions & Investment Age*, 740 N. Rush St., Chicago, Ill. 60611-2590.

If you have any questions or have not received a questionnaire, please contact Ms. Philip at (312) 649-5217.

# DOL probes investments of manager

By Joel Chernoff

NEW YORK — The Department of Labor is investigating investment activities by money manager Joseph H. Reich and the Reich & Tang L.P. pension and profit-sharing plans, *Pensions & Investment Age* has learned.

The investigation is believed to center on stocks of at least two small companies in which the company's retirement plans co-invested with Mr. Reich, his family members and business associates at the same time Mr. Reich served as trustee of the retirement plans. In one case, assets from a Reich & Tang-run limited partnership and accounts managed by Reich & Tang L.P. also were invested.

Reich & Tang is a New York-based money manager that runs $1.3 billion in tax-exempt money and $5.7 billion in mutual funds and a jumbo certificate of deposit product. Mr. Reich is chairman of the firm, although he has taken a less active role recently.

One Labor Department investigation involves a fight for control of Bomarko Inc., a Plymouth, Ind.-based packager, in which Mr. Reich successfully blocked a tender offer. The second involves investments in PCA International Inc., a Matthews, N.C.-based portrait photography studio chain rebounding from the brink of bankruptcy, where Mr. Reich gained a seat on PCA's board and a key role in the company's restructuring because of his group's stock ownership.

Although he stepped down as retirement plan trustee Jan. 4, according to PCA's 1988 proxy statement, Mr. Reich's actions as both investor and trustee could raise a number of legal questions under the Employee Retirement Income Security Act:

- Were the plans' investments used to bolster his position as a shareholder?
- Was he able to act solely in the interests of plan participants and beneficiaries?
- Were there any violations of ERISA's prohibitions on dealings between a plan and a related party?

Reich & Tang appears to have had some concerns about the independence of the transactions. After articles appeared in *P&I Age* in 1985 detailing the investments, Reich & Tang's board transferred to a named fiduciary the right to vote and sell shares owned by the retirement plans in the two companies.

As is their policy, Labor Department officials declined to confirm or deny that any investigation is under way. It is believed, however, officials are in the early stages of their investigation.

Mr. Reich and co-founder Oscar

*Continued on page 55*

# Funds' focus is global hirings

By Trudy Ring

International diversification was a priority for tax-exempt investors during the second quarter, with nearly $1.2 billion in international hirings reported, $1.1 billion for international equities alone.

With that figure, international equities outpaced all other alternative asset classes and all traditional ones except domestic equities, where there were $1.7 billion in hirings reported.

The figures are based solely on manager hirings reported in *Pensions & Investment Age* during the quarter; there might have been other hirings not publicized. (A complete listing of reported hirings begins on page 43.)

Passive management appears to be coming on strong in the international area; of the total in international equities, at least $215 million — almost 20% — was indexed. Domestic equity indexing was less popular, with only $150 million in new

*Continued on page 46*

# Medium-term notes:

## Volume grows, but questions remain

By Brad Rudin

Despite almost a 20% increase in the volume of medium-term notes and a substantial increase in market acceptance, some investment managers still are concerned about liquidity, pricing and yield.

Some also question the value of a point touted by dealers: The product can be used to match assets and liabilities because the issuer has the flexibility to structure a security that meets the investor's maturity and size requirements.

Despite these doubts, medium-term notes win praise from investors as a substitute for conventional corporate paper, especially at the short end of the yield curve. "There is no other real supply of short-term corporates we can buy in good size," said Christopher Harms, a fixed-income portfolio manager at Bear Stearns Asset Management, New York.

(Although many corporations issue commercial paper, the maturities on those issues only go up to 270 days.)

Institutional investors, meanwhile, are buying more medium-term notes than ever before.

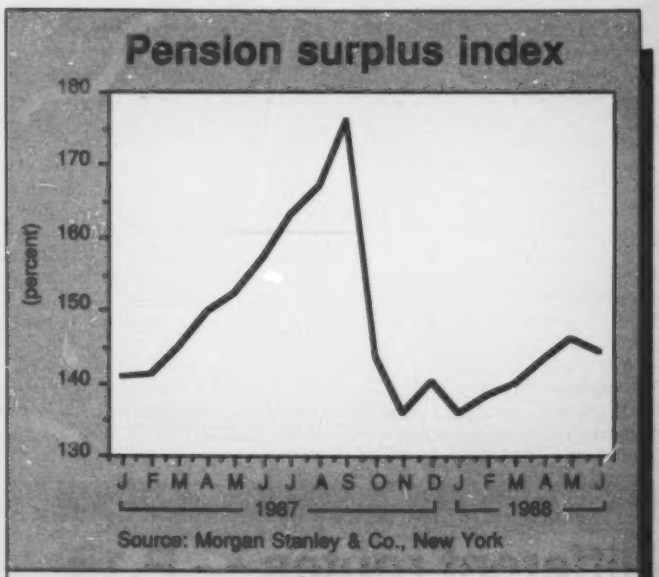
The medium-term note market grew to about $49 billion during 1987, compared with $41 billion during 1986, according to data compiled by Salomon Brothers Inc., New York. Based on annualized figures for the first quarter of 1988, the market is expected to reach about $93 billion this year.

Internally managed pension funds — government and corporate — accounted for 6.6% of the $11.5 billion in primary sales made by Merrill Lynch & Co. in 1987 compared with 3.5% of $11.2 billion in 1986, according to Alfred A. Kuskowski, senior vice president for marketing at Merrill Lynch Money Markets Inc., New York.

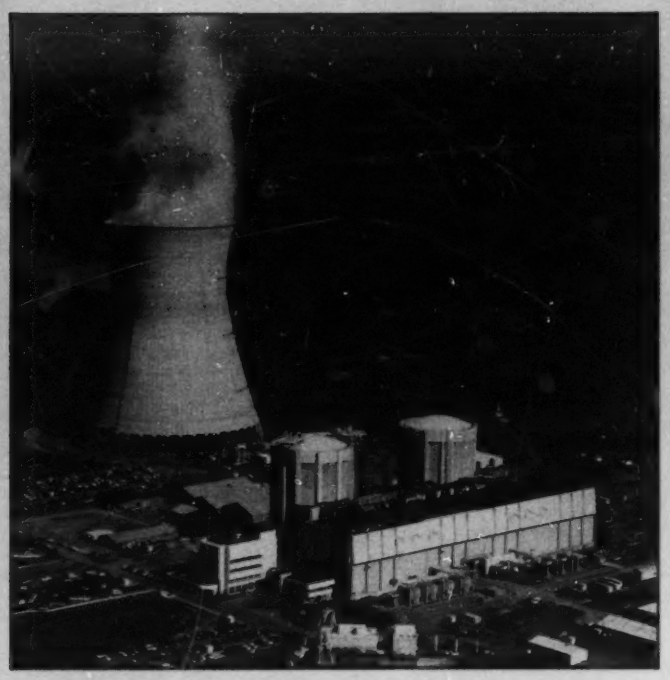
Merrill, the biggest player in the medium-term note market, could not break out how much it sold to investment management firms for pension accounts.

Figures supplied by Shearson Lehman Hutton Inc. show investment advisers and internally managed corporate pension funds accounted for 18.4% of the firm's

*Continued on page 47*




With this issue, *Pensions & Investment Age* begins publishing the Morgan Stanley Pension Surplus Index. Index values represent the ratio of assets to liabilities expressed as a percentage. The index will be published monthly.



The decommissioning of nuclear power plants, financed through external trust funds set up by utility companies, is expected to be a multibillion-dollar boon to the money management industry.

# Nuke trusts may be trove of $50 billion

By Trudy Ring

The Nuclear Regulatory Commission's new rule effectively requiring utilities to establish their nuclear decommissioning trusts with independent trustees and money managers could generate more than $50 billion in new business for the money management industry.

Prior to the NRC issuing its regulation last month, most utilities could collect money for decommissioning from ratepayers, keeping an account showing what has been collected, but not setting up a separate fund. The money generally was invested in utility operations.

With the external funding, the trust funds, like pension funds, receive contributions from the sponsoring utility.

There are two types of trusts, qualified and non-qualified. Contributions to a qualified trust are tax-deductible when made, like contributions to a pension fund, but may be invested only in certain fixed-income securities approved by the Internal Revenue Service. In a non-qualified trust, costs are not tax-deductible until the time decommissioning begins.

*Continued on page 50*

# Timers reverse cash positions

By Trudy Ring

Many of the market timers and tactical asset allocators that made big moves to cash earlier this year moved back into the stock and bond markets in June, redeploying slightly more than $1.9 billion.

In many cases, the managers moved all or nearly all of their assets under management. Lack of liquidity in the markets, the falling dollar, rising interest rates and deteriorating stock and bond prices were reasons given by various managers for moves out of the markets (*Pensions & Investment Age*, May 30); reversals in these trends accounted for the moves back in.

Among the larger moves:

• Wilmington Trust Co., Wilmington, Del., moved its $750 million in quantitatively managed bond portfolios to a fully invested position from cash toward the end of June. The trust company had moved these accounts into cash in mid-March. In its $500 million equity portfolios, Wilmington Trust retains the 10% to 12% cash position it has had since the fourth quarter of 1987.

• Consistent Asset Management Co., Wilmington, Del., switched its $300 million under management to bonds from cash the last week in June. In March, the firm, which then had $250 million under management, had gone 100% into cash from bonds.

• Davis, Weaver & Mendel Inc., Atlanta, moved its $190 million in equity accounts to full investment by June 3, after having had 60% of that amount in cash at the end of May. It also moved its $50 million in fixed-income portfolios to 100% long bonds from 100% cash in June.

• Schield Management Co. Timing Service, Denver, moved its $133 million in equity accounts to a fully invested stance as of June 22. The firm had gotten out of the equity markets May 19. In June, it also reversed position on its $2 million in bond accounts, to full investment from cash.

• Avatar Associates, New York, raised its equity allocation to between 75% and 80% from 55%. It moved to the 55% level from 100% equities during March and April. Avatar has $1.5 billion under management, shifting between stocks and cash.

• R. Meeder & Associates Inc., Dublin, Ohio, moved its $350 million in equity accounts to an 85% invested position from a 50-50 stock-cash split it had maintained since the beginning of the year. The firm also moved its $50 million in bond accounts to full investment from almost all cash, after having gone into cash two months ago.

• Lesesne & Co., Atlanta, moved its $60 million under management to 100% equities after having gone into cash in April.

• R.M. Leary & Co. Inc., Denver, moved its $20 million under management into equity mutual funds from money market funds June 1 through 9. The firm had switched to the money market funds in late April and early May.

In a smaller move, Dana Investment Advisors, Brookfield, Wis., increased the firm's $30 million in equity portfolios to a 38% invested stance from only 5%. Dana had been out of the market longer than the others, too; it had a 95% cash position in the equity portfolios since January.

Also, Matrix Capital Management, Greenwich, Conn., moved its market-timing accounts to their normal equity exposure in the past month, after having been somewhat underweighted in equities previously. The normal exposure varies for each account, said Michael A. Petrino, president; he did not have a dollar figure for the amount moved back to the market. Matrix has $200 million in market-timing accounts.

Officials at Wilmington Trust and Consistent said they were encouraged by upward trends in the prices of U.S. Treasury securities. Daryl L. Hudson, chairman of Consistent, also mentioned the rising dollar as a reason for becoming fully invested.

"The momentum of stock prices" (of stock prices) "is now the highest it's been in three years."

**Marshall Schield**
**Schield Management**

The momentum of stock prices also is encouraging, said Marshall Schield, president of Schield Management. The firm follows 4,000 stocks, looking at their current prices relative to their 15-week moving average. "The momentum is now the highest it's been in three years," Mr. Schield said.

"The bottom line is the trend and momentum have moved up,"

*Continued on page 49*

# Outlook bright

## Economists doubt '88 slump

By Curtis Vosti

The majority of economists surveyed by *Pensions & Investment Age* agree there is little chance of a recession by the end of 1988.

Surprised by the resilience of the economy in the first half, the economists believe the economy will moderate a bit during the remainder of the 1988.

The October market crash was still very much on their minds when they made their initial projections in December.

At year-end 1987, three of 16 economists predicted a first-half real growth in the gross national product at or above the 3.3% figure now estimated by many economists. The U.S. Department of Commerce has reported the first-quarter GNP grew by 3.6%; first-half figures are due July 27.

David Levine, chief economist for Sanford C. Bernstein & Co., New York, was one who didn't think the October crash would affect the economy's growth.

Mr. Levine had predicted a whopping 6.7% GNP growth during 1988's first half.

Most consumers don't own stock, he said, and therefore didn't lose money in the crash. Those that did weren't apt to cancel purchases that would affect the GNP.

"If you don't buy that extra Persian rug, it doesn't affect the GNP," Mr. Levine said. "If you don't buy an existing second house, it doesn't affect the GNP. If you decide not to buy a diamond, you affect the South African GNP, not the American GNP," he said.

Nonetheless, Mr. Levine said consumer spending fell short of what he expected, leading to a first-half growth rate about half of what he predicted.

In December, he predicted a 4.3% growth rate for the second half of 1988.

Mr Levine has revised that prediction to 4%.

**Recession**

In December, Robert Dederick,

*Continued on page 51*

**What the experts predict**

| | GNP 2nd half | Inflation 2nd half | 90-day T-bills Dec. 31 | 30-year Treasuries Dec. 31 | Federal deficit Sept. 30 ($ billions) | Trade deficit Dec. 31 ($ billions) |
|---|---|---|---|---|---|---|
| David Bostian<br>Bostian Research | 3.0% | 3.0% | 6.0% | 7.9% | 140 | 100 |
| Robert Chandross<br>Lloyds Bank N.Y. | 2.4 | 4.8 | 7.0 | 9.8 | 155 | 143 |
| Robert Dederick<br>Northern Trust | 2.8 | 4.6 | 7.0 | 9.7 | 155 | 135 |
| Lacy Hunt<br>Carroll, McEntee & McGinley | 3.3 | 6.1 | 6.9 | 9.7 | 175 | 155 |
| Edward Yardeni<br>Prudential-Bache Securities | 3.0 | 4.0 | 5.5 | 8.0 | 165 | 115 |
| David Levine<br>Sanford Bernstein | 5.8 | 5.1 | 7.8 | 10.8 | 140 | 135 |
| David Littmann<br>Manufacturers Nat'l | 2.4 | 4.8 | 7.3 | 9.6 | 157 | 107 |
| Richard Rippe<br>Dean Witter Reynolds | 2-3.0 | 4.5-5.0 | NA | NA | 157 | 140-145 |
| John Hekman<br>Claremont Institute | 3.3 | 3.5 | 5.7 | 8.5 | 150 | 135 |
| Francis Schott<br>Equitable Life | 3.0 | 5.5 | 7.0 | 9.8 | 155 | 140 |

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# Merrill leader in underwriting

By Brad Rudin

NEW YORK — Merrill Lynch Capital Markets clung to its top-ranked position in the domestic underwriting rankings for the first half, but lost some of its lead over second-ranked Salomon Brothers Inc.

Although new-issue volume picked up in the second quarter, volume for the first half lagged that for the same period last year. Total domestic volume stood at $143.8 billion in the first half of 1988, down 9% from the $158.2 billion in the first half of 1987, according to data provided by IDD Information Services Inc., New York.

Domestic debt volume sagged 1%, to $124.3 billion from $125.6 billion a year earlier. Common stock volume, still feeling the effects of Oct. 19, skidded about 38% to $16 billion from $25.6 billion.

The demand for capital in capacity-strained, export-oriented industries and an increase in debt-financed corporate takeovers lifted debt volume in the second quarter, according to Salomon Brothers research.

A steepening yield curve in April and May encouraged corporate borrowers to rely on commercial paper and bank loans, but a 40 basis-point drop in corporate yields in June brought issuers back to the bond market, the Salomon report said.

Increased volume in the debt market works to Salomon's advantage in the league tables because of the firm's traditional domination of the bond business. Salomon emerged as the biggest underwriter of corporate debt in the first half, after finishing in second place below Merrill in the first quarter.

Merrill took 15.1% of the total domestic underwriting business in the first half compared with Salomon's 14%; in the first quarter, Merrill had a 17.2% slice compared with Salomon's 14.3%, according to IDD.

Merrill's underwriting volume in the first half of 1988 resulted from such issues as the Templeton Global Income Fund ($1.1 billion), Mobil Oil Canada Ltd. ($500 million), The CIT Group Holdings Inc. ($500 million) and Chrysler Financial Corp. ($300 million).

Merrill's ability to finish 1988 on top depends in part on the pace of corporate debt issuance, said

*Continued on page 50*

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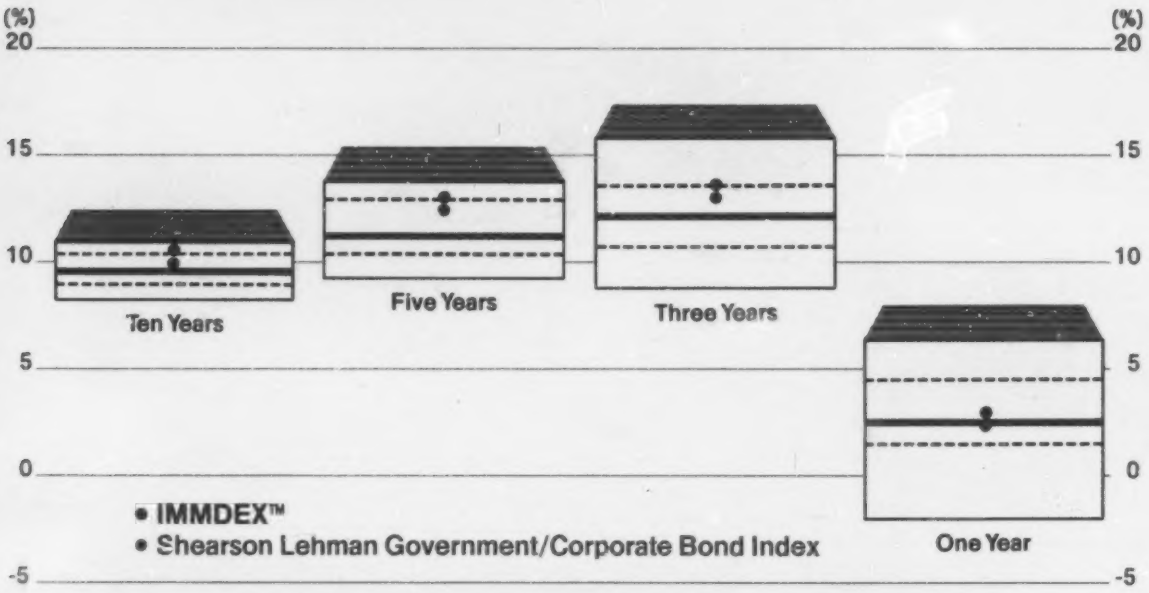


Bond fund total rates of return for periods ended December 31, 1987. Source SEI.

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## CORRECTIONS & CLARIFICATIONS

- **Kennedy Associates Inc.**, Seattle, profiled in the May 23 issue, has $1.606 billion in real estate investments. The firm should have been 25th on the list of the largest managers ranked by equity real estate assets with $800 million and 12th on the list of the largest managers ranked by mortgage-backed securities with $726 million.
- **Michigan National Investment Corp.** is a subsidiary of **Independence One Investment Services**. Michigan National was identified incorrectly in Independence One's profile in the May 23 issue. Another Independence One subsidiary, **Morison Asset Management**, is a balanced and fixed-income manager. Its style was identified incorrectly in the May 23 issue.
- **Metropolitan Life Insurance Co.** will continue to do sale-leasebacks on its own, but also will work in cooperation on such transactions with United Trust Fund, a Miami-based sale-leaseback firm. In a June 13 article, a spokeswoman for United Trust Fund said Metropolitan Life's sale-leaseback business would be referred to United Trust.
- **Bankers Trust Co. — Investment Management Group** was omitted from a list of managers using fixed-income futures in the June 13 issue.
- **Erich Weissenberger's** name was spelled incorrectly in the June 27 story on Favia, Hill & Associates Inc.

FEATURE

# A top-down look at 'junk'

By Martin S. Fridson

With high-yield, or junk bond, debt representing 20% of the total corporate bond market, it is an asset category that is difficult to ignore, but costly to examine.

The necessary research and specific credit analyses preclude many institutions with limited management resources from investing in the debt. Investors continue to wonder whether top-down management skills they have developed in other markets can be transferred to the speculative-grade (i.e., below triple B) segment.

They see their market-timing talents of limited value, because low-rated bonds do not respond as directly as high-grade bonds to interest rate movements.

Their top-down approaches of identifying undervalued sectors of the market appear of little use if, as they might have been told, each high-yield issue trades on the basis of its unique credit characteristics, with no observable industry group effect. They believe active management strategies of the top-down sort are not productive in an environment where, they suppose, secondary market-making is sparse and dominated by a single firm.

These are proper concerns for the pension fiduciary investigating unfamiliar territory. To some extent, however, the questions reflect a lag in recognition of important changes that are making the high-yield bond sector more similar to other securities markets.

In the past few years, primary market share has been dispersed rapidly among several leading underwriters. While the perception persists among non-participants that the high-yield secondary market is monopolistic, portfolio managers familiar with the sector know that to get bigger pieces of the underwriting pie, competitors have had to expand their market-making activities as well.

This in not to deny that for many smaller issues the underwriter is the only firm providing research coverage or making a market. Such bonds represent a subsector of the high-yield market in which investment organizations lacking large in-house credit staffs may indeed be ill-equipped to operate.

There is another subsector, however, for which many pension investors are well suited. It is the so-called go-gos. These are large, liquid issues — in many cases created through recapitalizations of major companies formerly rated A or double A — and are well-adapted to the total-return style.

With perhaps six securities firms analyzing and making markets in go-gos, issues by such companies as Beatrice Cos. Inc., FMC Corp., R.H. Macy & Co. and Owens-Illinois Inc. typically trade with bid/asked spreads of about $5 per $1,000 face value. Such a spread typically is good for trades of par amounts up to $5 million, indicating the amount of liquidity available to investors without disrupting the market and influencing the bond's price.

Using this select group of go-gos, pension investors can implement top-down management strategies that resemble their approaches to other sectors and produce attractive returns at acceptable risk.

For example, an especially conservative pension fund might not be willing to allocate even a portion of its assets to a pure high-yield program, but might approve a hybrid strategy, combining high-yield bonds and Treasury securities. The proportions of the two asset classes within the hybrid portfolio can be varied, depending on market conditions and relative value. This is an active approach that will lend itself well to skills that are highly developed within many pension fund organizations.

There is sufficient volatility in the spread between high-yield bonds and 10-year Treasuries to make this hybrid strategy worthwhile. (The average maturity of junk bonds at the end of 1987 was about 10½ years.)

Between January 1986 and the end of last month, for example, the spread ranged between about 360 and 570 basis points.

Total return figures tell the same story. During 1987, high-yield bonds outperformed intermediate Treasuries through the first nine months, but were swamped (7.52% vs. 1.02% non-annualized) in the fourth quarter.

To quantify the benefits of market timing, imagine a hybrid portfolio with a maximum high-yield weighting of 50% and a minimum of 0%, with the balance invested in intermediate Treasuries.

A manager who read the market conditions correctly would have been at a maximum high yield position through Sept. 30 and fully invested in Treasuries for the balance of the year.

Allowing one full point of transaction costs on the switch, the hybrid portfolio would have returned 4.57% for the year, a significant improvement over the full-year −1.81% return provided by a pure intermediate Treasuries portfolio.

*Continued on page 41*

**Martin S. Fridson, principal and manager of credit research at Morgan Stanley & Co., New York, adapted this article from a report he wrote.**

BellSouth

**Junk bond total returns**
**(by industry sector)**

| | 1987 | 1988 |
|---|---|---|
| Consumer goods | 5.3 % | 16.72% |
| Conglomerates | −0.04 | 10.59 |
| Electric utilities | 0.48 | 22.58 |
| Energy | 9.46 | 0.24 |
| Financial services | 2.69 | 19.03 |
| Gas utilities | 11.25 | 12.48 |
| Health care | −3.08 | 15.66 |
| Leisure products | −0.72 | 16.56 |
| Building products | 4.34 | 18.11 |
| Capital goods | 5.78 | 14.49 |
| Chemicals | 3.7 | 20.7 |
| Packaging | 5.31 | 15.75 |
| Manufacturing | −1.63 | 18.58 |
| Media | 10.57 | 21.15 |
| Metals/mining | 15.08 | −11.93 |
| Real estate/const. | −4.12 | 16.97 |
| Retailing | 3.22 | 12.63 |
| Technology | −2.09 | 15.66 |
| Telecommunications | 10.54 | −4.81 |
| Transportation | 0.13 | 8.41 |

Source: Morgan Stanley & Co., New York

# Junk market

*Continued from page 40*

The hybrid strategy also would have reduced volatility — instead of a −6.31% loss in the third quarter on Treasuries, an investor would have lost only −3.84% with a 50/50 mix.

Another top-down technique that can be adapted from other segments of the capital markets involves swapping between industry subsectors. Today's high-yield issuers are fairly well distributed among a variety of industries, in contrast to conditions that prevailed five to 10 years ago. In 1987, the market totaled about $130 billion par value. These industry subsectors can display widely divergent returns, reflecting differing short-term and long-term credit trends, as shown in the chart.

Capitalizing on this variability of returns requires the use of a larger universe than just the go-go issues, and therefore a larger commitment of resources to individual-company credit analysis. If the resources are available, however, there can be a substantial payoff on correctly predicting the industry winners and losers.

Based on the 1987 range of total returns (from 15.08% in metals/mining to −4.12% in real estate/construction), let us suppose a manager had simply identified the industries that constituted the worst-performing quartile.

An equally weighted portfolio of the remaining 15 industries would have produced a return of 5.85%, vs. 3.81% for the passive 20-industry portfolio. (Because some high-yield issues are not classified among the industries Morgan Stanley & Co. tracks, the 20-industry return varies somewhat from the total return of 4.61% that we estimate for the entire high-yield universe in 1987.)

Correctly selecting the top half of the industry universe would have raised the portfolio's return to 8.13%, while concentrating on the top quartile would have earned 11.38%.

These results suggest a manager who is oriented toward spotting group trends need not be intimidated by the prospect of participating in a market in which bottom-up security selection has heretofore been the dominant style of management.

It is true that each year, painstaking credit work on individual issuers turns up a limited number of opportunities to realize 10% and 20% gains. The overall portfolio impact of these "home runs" might be limited, however, by single-issuer concentration restrictions — typically 5% of assets for high-yield mutual funds. ■

# Trends

*Continued from page 39*

the firm in a search.

He complained about "the inability of (some) managers to admit mistakes." He told a story about an unidentified investment manager with a big commitment to the energy sector, which began to turn around only after seven years of languishing. At risk of sounding as if he were endorsing emphasis on short-term results, Mr. Lincoln said he "found seven years beyond the pale of human tolerance."

In addition, he said he looks askance at "a manager that tries to change the name of his style to fit what's in vogue," or those that pick unique time periods, or inappropriate benchmarks, to report performance.

He also stressed that managers must be sensitive to clients. Without mentioning names, he told of a manager, vying for an assignment, who appeared before representatives of a union fund bragging about the quality of its computer-produced reports. The union, Mr. Lincoln noted, represented printers; it didn't even allow the manager to finish the presentation.

"We want people who can do (a presentation) well," Mr. O'Donovan added. "It takes a lot of skill. . . . We don't want any surprises."

He mentioned an unidentified manager pitching to a group of nuns for an assignment.

Without any forewarning, the manager "decided to do part of the presentation in Latin. The nuns didn't speak Latin." The manager didn't get the business.

Both Messrs. O'Donovan and O'Leary assailed the practice of some managers to use their track records at a former firm as part of the historical performance of their current firm. Mr. O'Donovan said the records were irrelevant because the investment process and contributors at each firm would be different.

Of the three consulting companies represented on the panel, Mercer-Meidinger-Hansen is the only one that doesn't accept soft-dollar payment. Mr. O'Leary noted Callan presents its clients with bills in hard dollars, "but 70% of clients elect to pay us in commission dollars."

"I'd love to see soft dollars go away," he added. "Unfortunately, I think they are going to be around for some time."

But Mr. Lincoln said "the public record of abuses of this will put pressure" for the elimination of soft dollars. "It's a question of when, not a question of if."

None of the panelists specified any abuses. ■

*Pensions & Investment Age* welcomes letters to the editor.

All letters should include name, address and, if appropriate, the company of the writer.

*P&I Age* editors reserve the right to edit any letter for reasons of space or clarity.

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# Funds' focus

*Continued from page 2*

index fund accounts reported during the quarter.

Observers said domestic stock indexing might have reached a saturation point, while international indexing still has far to go.

Although active management attracted more business than indexing overall in both international and domestic investing, some of the largest single accounts were for index funds: the Employee Retirement System of Rhode Island and the New York-based Rockefeller Foundation each moved $150 million to equity index accounts. Because of this, prominent indexers are the top two firms in assets gained during the quarter: Bankers Trust Co. — Investment Management Group, New York, and Wells Fargo Investment Advisors, San Francisco.

Although international managers are predicting huge inflows into international fixed-income indexing accounts, none of the $117 million allocated to international bonds during the quarter was indexed. Of the $836 million allocated to domestic bonds, actively managed accounts drew $661 million; dedicated or immunized portfolios, $100 million; and index funds, $75 million.

Domestic balanced management accounted for $144.5 million; also, one $20 million global balanced account was reported. There was $96.5 million in accounts defined as "active" or "tactical" asset allocation; real estate accounts drew $609 million; venture capital, $61 million; and guaranteed investment contracts, $38 million.

Hirings by public pension funds again contributed to the big numbers in the international area.

The $7.2 billion Public Employees Retirement Association of Colorado, Denver, doubled its international commitment by hiring three active equity managers for up to $100 million each. The $1 billion New Hampshire Retirement System hired its first two global bond managers for $15 million each.

Passive international strategies might stand to gain because of active managers' difficulty in outperforming market indexes.

That was the reasoning behind the $1.8 billion Rockefeller Foundation's $150 million shift to an enhanced passive strategy, managed by Wells Fargo, from active international managers.

Interest in international investing, however, might be peaking, some consultants said. "We don't see the trend continuing much longer," said James E. Yanni, senior vice president of Butcher Consulting Group, Pittsburgh.

"There is interest, but people are a little bit concerned that the dollar may have hit bottom," added Keith Stransky, vice president of Evaluation Associates Inc., Norwalk, Conn.

Styles come in and out of favor, and active management might be coming in, Mr. Yanni said. One reason might be the recent good performance of small-capitalization stocks, as opposed to the large-cap issues in the Standard & Poor's 500 stock index, he said. During the first quarter, the NASDAQ industrials returned 13.4% vs. the S&P 500's 4.8%.

Paul Berg, president of Berg Fiduciary Consultants Inc., Port Chester, N.Y., said pension executives seem to have the greatest interest in quantitative equity strategies.

Quantitative managers that had large or multiple new accounts in the quarter included The Chicago Corp., Denver Investment Advisors and Pittsburgh-based Triangle Portfolio Associates.

In real estate, the past quarter's numbers were buoyed by an apartment fund offered by Security Capital Real Estate Corp., New York; it drew seven clients and $74.5 million. In venture capital, First Chicago Investment Advisors' $50 million pooled fund helped the firm show the largest number of new accounts, nine, reported during the quarter. ■

**Most new assets***
**2nd quarter 1988**

| Firm | $ millions |
|---|---|
| Bankers Trust | 189 |
| Wells Fargo | 160 |
| Morgan Stanley | 140 |
| Denver Investment | 130 |
| Nomura Capital | 125 |
| Oechsle International | 120 |

* As reported in *Pensions & Investment Age*

**Most new accounts***
**2nd quarter 1988**

| Firm | New accounts |
|---|---|
| First Chicago Investment | 9 |
| Security Capital Real Estate | 7 |
| Harris Trust | 5 |
| Trust Co. of the West | 5 |
| Miller, Anderson & Sherrerd | 4 |
| J&W Seligman | 4 |

* As reported in *Pensions & Investment Age*

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# CIBA plan adds exec, advisers

By Marlene Givant

ARDSLEY, N.Y. — The $550 million CIBA-GEIGY Corp. pension fund has appointed a new pension executive, hired four fixed-income managers and might increase its allocation to venture capital and real estate.

Bob Hunkeler, formerly controller of the pharmaceutical division of the parent company, CIBA-GEIGY Ltd., Basel, Switzerland, has been named manager of trust investments.

In his new post, Mr. Hunkeler will develop recommendations for the long-term investment policy of the pension trust and evaluate the performance of managers. He will report to William J. McHugh Jr., director of trust funds, who previously held the position.

Mr. Hunkeler's first projects will include a venture capital search using Wilshire Associates, Santa Monica, Calif. The fund plans to allocate $10 million to four partnerships to get closer to a 5% venture capital target from the 2% in venture capital now.

Mr. Hunkeler also will undertake an in-house study of real estate to see if the fund should increase its allocation to 15% from 10%.

With all these asset allocation decisions in the works, the fund has shifted $70 million to intermediate-term fixed-income accounts as an alternative to cash.

Brown Brothers Harriman & Co., J.P. Morgan Investment Management Inc. and Chase Investors Management Corp., all of New York, each will manage $15 million. NCNB National Bank, Charlotte, N.C., will manage $25 million in its Stable Capital Fund. All portfolios will have maximum maturities of four years with average durations between 1.5 and 2.5 years.

The fund, which has 15% in fixed income, has a long-term target of 20% for the asset class. "This (set of hirings) was an intermediate step," Mr. McHugh said.

Assets came from accounts run by State Street Bank and Trust Co., Boston, the fund's custodian, which still runs short-term assets.

All four managers were appointed based on their success at running other CIBA-GEIGY accounts. Brown Brothers Harriman and J.P. Morgan run fixed income for the pension fund, NCNB runs real estate, and Chase runs an intermediate-term bond account for the company's 501(c)(9) plan.

The pension fund's asset mix is 45% domestic equities, 18% short-term assets, 15% fixed income, 10% real estate, 10% international and 2% venture capital. ■

## CURRENT ACCOUNTS

*Continued from page 45*

**Schroder Capital Mgmt. Int'l**
State of Connecticut Trust Funds: Pacific Basin equities; $25 million.

**Scudder, Stevens & Clark**
Schering-Plough Corp.: international equities; $20 million.

**Security Capital Real Estate Corp.**
Arlington (Va.) County Supplemental Retirement System: apartment fund; $6 million. Bank of Oklahoma: apartment fund; $1 million. Los Angeles City Fire & Police Pension System: apartment fund; $10 million. Grumman Corp.: apartment fund; $5 million. GTE Corp.: apartment fund; $15 million. Los Angeles County Employees' Retirement Association: apartment fund; $25 million. Southern New England Telephone Co.: apartment fund; $12.5 million.

**Security Pacific Nat'l Bank**
University of California: master custodian; $11.5 billion. Los Angeles Water & Power Employees' Retirement System: master trustee; $1.5 billion.

**J & W Seligman & Co.**
City of New York Fire Department Pension Fund: equities; portion of $325 million. Carteret Savings Bank: balanced; $13 million. Carteret Savings Bank: 401(k) and profit-sharing funds manager; $3.5 million. Brush Wellman Inc.: equities; $5 million.

**Sovran Bank**
Virginia United Methodist Homes: balanced; $1 million.

**State Street Bank and Trust Co.**
G.C. Murphy Co.: GICs; $18 million. Reichhold Chemicals Inc.: GICs; $10 million.

**Strong/Corneliuson Capital Mgmt.**
Logicon Inc.: balanced; portion of $30 million.

**STW Fixed Income Mgmt.**
Southern California Edison Co.: fixed income for nuclear decommissioning; portion of $100 million.

**Sun Bank Investment Mgmt. Group**
Oklahoma Police Pension and Retirement System: equities; $35 million.

**TA Associates**
Massachusetts Pension Reserves Investment Management Board: venture capital; $5 million.

**TCW Asset Mgmt. Co.**
National Telephone Co-op Association: real estate; $12.5 million.

**TCW Realty Advisors**
Cargill Inc.: closed end real estate fund; portion of $20 million. Warner-Lambert Co.: real estate; $6 million.

**Trammell Crow Ventures**
Michigan State Employees' Retirement Systems: real estate venture fund; $50 million. Los Angeles County Retirement Association: real estate venture fund; $10 million.

**Triangle Portfolio Associates**
National Telephone Co-op Association: equities; $12.5 million. Babcock Industries Inc.: equities; $10 million. International Brotherhood of Electrical Workers-National Electrical Contractors Association Pension Benefit Trust Fund: equities; $25 million.

**Trust Co. of the West**
Thomas J. Lipton Inc.: real estate; undetermined. Olin Corp.: commingled realty fund; undetermined.

**Vanguard Group**
Logicon Inc.: money market; portion of $30 million.

**Well, Patterson, Hamilton & Allen**
Boy Scouts of America; equities; undetermined. City of Tampa (Fla.) General Employees Retirement Fund: equities; $15 million.

**Warburg Investment Mgmt. Int'l**
Weirton Steel Corp.: international equities; $10 million.

**Weiss, Peck & Greer**
Los Angeles County Employees' Retirement Association: equities; $80 million.

**Wells Fargo Investment Advisors**
Rockefeller Foundation: EAFE index; $150 million. Polaroid Corp.: bond index; $10 million.

**Wertheim-Philippe Int'l**
Oregon Public Employes Retirement System: international; portion of $158 million. Public Employees Retirement Association of Colorado: international; $100 million.

**Wilmington Trust Co.**
H.F. du Pont Winterthur Museum Inc.: equities; $5.5 million.

**Worldinvest Ltd.**
Dennison Manufacturing Co.: global balanced; $20 million.

# $50 billion

*Continued from page 3*

Investment guidelines for non-qualified trusts are set by state utility commissions and may be more liberal than those of the IRS; for instance, California allows non-qualified trusts to put up to 60% of their assets in equities.

To date, many utilities that have set up trusts have opted for the qualified type, but some have set up both types of trusts because of limits on the amount of tax-deductible contributions to qualified trusts.

Also, because the tax deduction for contributions became law in the 1984 federal tax bill, money set aside before that for decommissioning is not in qualified trusts, said Harry Haynes, principal of William M. Mercer-Meidinger-Hansen Inc., Kansas City, Mo.

The assets of qualified trusts must be invested in certificates of deposit, Treasury and agency securities or municipal bonds.

"There's going to be a lot of money flowing into these trusts over a period of years," said Richard Marsh, director of benefit investments for Ohio Edison Co., Akron, which expects to set up a decommissioning trust later this year.

"There's a lot of interest from the investment community in this," he said.

"It's sort of a sure thing from their point of view."

The managers benefiting most from such trusts may be those with expertise in fixed income and experience with taxable as well as tax-exempt investing. The trusts' profits are taxable at an annual rate of 34%.

This makes municipal bonds an attractive choice, because their coupon income is tax-exempt, although capital gains on such securities are taxable, said Gerry Barth, portfolio manager at Morgan Stanley Asset Management, New York.

At times, however, Treasuries might have better after-tax yields than municipals' tax-free ones, he said.

Mr. Barth said there are 115 nuclear reactors in use in the United States; the decommissioning cost for each one could range from $150 million to $500 million, he said.

This would mean between $17.2 billion and $57.5 billion in decommissioning trusts. Other estimates have put the expected flow into trusts as high as $100 billion.

"It's a difficult number to put your hands on as to what the size will be," he said.

No definitive figures were available on how much already is in trusts, although more than one-third of the nation's utilities have established them.

Money managers might look to decommissioning trusts to replace some of the dollars they haven't been getting from pension funds the past few years, as companies have been able to lower pension fund contributions, Mr. Marsh said.

But they might have to be patient, said Christopher C. Arvani, assistant treasurer-banking at Detroit Edison Co.

"Our fund is a tiny fund — it's not the megabucks Wall Street is looking for," Mr. Arvani said.

Detroit Edison recently set up the decommissioning fund, hiring National Bank of Detroit as trustee and manager. It expects to contribute about $2.5 million a year.

As for funding, the new regulation states internal funding is not acceptable, leaving external as the only viable option, said Scott DuBoss, a partner in the Washington law firm of Bishop, Cooke, Purcell & Reynolds.

"Economists generally agree the internal mechanism is somewhat less costly than external," Mr. DuBoss said.

But the tax advantage of the external method makes up for this, he said.

Until about two years ago, two-thirds of utilities nationwide funded decommissioning trusts internally, Mr. DuBoss said.

That number has been decreasing as more utilities opt for external funding and some states (fewer than 20) require it. ■

# Merrill

*Continued from page 6*

Brenda McCoy, an equity analyst at PaineWebber Inc.

"If the bond market continues fairly strong, then I think Salomon will come out on top," she said.

Merrill, ranked third in 1987, had to muscle its way past the biggest players in the bulge bracket to take first place.

"People are obviously feeling pretty good," said Grant Kvalheim, head of capital markets at Merrill Lynch. "We're not managing the business on a quarter-by-quarter basis. The goal is to do it for the whole year."

Merrill Lynch got to the top by "bidding aggressively for corporate debt" and by underwriting large closed-end funds, said Michael W. Blumstein, an equity analyst at First Boston Corp.

Merrill dropped to second in the global underwriting rankings for the first half, swapping places with First Boston/Credit Suisse First Boston, which had ranked second in the first quarter.

Still, Merrill Lynch has much to be pleased about. The firm grabbed the No. 1 spot in the first half in both initial public offerings and total equity offerings, categories in which it had held second and third place, respectively, in the first quarter.

Merrill also has done well in earning healthy fees for its underwriting services, IDD data show. If all credit is given to the book manager, Merrill produced a total gross spread of $314.3 million. Deals managed by Drexel Burnham Lambert Inc. earned a gross spread of $253.9 million, making the biggest underwriter of high-yield bonds the second biggest producer of underwriting fees.

Although IDD data do not show how much of the gross spread each book manager took for itself in a co-managed offering, the figures offer a rough measure of the fees collected by underwriters.

Merrill's deals earned an average total gross spread of $1.786 million while the figure for Drexel is $3.096 million. Drexel's spreads are higher than Merrill's and most other major investment banks because of its prowess in the riskier and more rewarding non-investment-grade business.

Salomon Brothers, the second-ranked investment bank based on domestic underwriting volume, produced an average gross spread of $1.14 million while the deals managed by third-ranked Goldman, Sachs & Co. generated an average gross spread of $607,000.

Among other highlights of first-half underwriting:

- Drexel Burnham emerged from the first half with 46.7% of the high-yield bond business, compared with 41.5% a year earlier. News reports of federal inquiries into Drexel's high-yield operations apparently have had little negative impact on the firm's high-yield business.
- PaineWebber and Prudential-Bache Capital Funding scrambled back into the top 10 in domestic underwriting after finishing 17 and 11, respectively, in the first half of 1987. Kidder, Peabody & Co. and Smith Barney, Harris Upham & Co. dropped out of the top 10.
- Wheat, First Securities Inc. completed the first half with more total underwriting volume than Donaldson, Lufkin & Jenrette Inc. and Dillon, Read & Co. combined. Wheat, First finished the first half of 1988 with an underwriting volume of $2.1 billion. DLJ finished with $835.1 million; Dillon had $1 billion.

Wheat, First — a Richmond, Va.-based securities house — was the only firm from outside New York City to finish in IDD's list of the top 15 domestic underwriters.

- Salomon Brothers, the traditional leader in mortgage-related securities, finished second behind Goldman, Sachs. The positions of the two firms in the mortgage area was reversed in the same period last year. ■

## 1st half 1988 underwriting rankings
## (Full credit to lead manager)

### All issues - global*

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. First Boston/CSFB** (2) | 25,206.8 | 9.8 |
| 2. Merrill Lynch (3) | 24,510.3 | 9.5 |
| 3. Salomon (1) | 22,195.2 | 8.6 |
| *4. Goldman, Sachs (4)* | *21,397.8* | *8.3* |
| 5. Morgan Stanley (5) | 16,356.4 | 6.3 |
| 6. Shearson Lehman (6) | 12,590.5 | 4.9 |
| 7. Drexel Burnham (8) | 10,960.1 | 4.2 |
| 8. Nomura (7) | 10,500.2 | 4.1 |
| 9. Deutsche Bank (12) | 6,945.5 | 2.7 |
| 10. Daiwa (10) | 6,538.2 | 2.5 |

* All taxable issues, debt and equity, worldwide
** First Boston/Credit Suisse First Boston
Source: IDD Information Services, New York
Numbers in parentheses show 1st half 1987 rankings

### All issues - domestic*

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Merrill Lynch (3) | 21,760.2 | 15.1 |
| 2. Salomon (1) | 20,161.4 | 14 |
| 3. Goldman, Sachs (4) | 19,584.9 | 13.6 |
| 4. First Boston (2) | 16,103.5 | 11.2 |
| 5. Morgan Stanley (5) | 14,346.3 | 10 |
| 6. Shearson Lehman (6) | 11,906.2 | 8.3 |
| 7. Drexel Burnham (7) | 10,960.1 | 7.6 |
| 8. Prudential-Bache (11) | 5,021.1 | 3.5 |
| 9. Bear, Stearns (9) | 4,599.9 | 3.2 |
| 10. PaineWebber (17) | 4,066.8 | 2.8 |

* All taxable issues, debt and equity, sold in U.S. only
Source: IDD Information Services, New York
Numbers in parentheses show 1st half 1987 rankings

### All issues - domestic*

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Merrill Lynch (5) | 15,447.1 | 17.1 |
| 2. Salomon (1) | 13,667.1 | 15.1 |
| 3. Goldman, Sachs (2) | 10,729.5 | 11.9 |
| *4. First Boston (4)* | *10,304.1* | *11.4* |
| 5. Morgan Stanley (3) | 9,265.4 | 10.3 |
| 6. Drexel Burnham (7) | 8,339.3 | 9.2 |
| 7. Shearson Lehman (6) | 7,159.9 | 7.9 |
| 8. Smith Barney (10) | 2,452.2 | 2.7 |
| 9. PaineWebber (15) | 2,348.3 | 2.6 |
| 10. Wheat, First Securities (11) | 2,000 | 2.2 |

* All taxable issues, debt and equity, excluding mortgage-related and agency issues sold in U.S. only
Source: IDD Information Services, New York
Numbers in parentheses show 1st half 1987 rankings

### All debt issues

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Salomon (1) | 19,154.9 | 15.4 |
| 2. Goldman, Sachs (4) | 18,279.2 | 14.7 |
| 3. Merrill Lynch (3) | 17,923.9 | 14.4 |
| 4. First Boston (2) | 15,136.5 | 12.2 |
| 5. Morgan Stanley (5) | 13,830.6 | 11.1 |
| 6. Drexel Burnham (6) | 9,512.2 | 7.7 |
| 7. Shearson Lehman (7) | 8,915.4 | 7.2 |
| 8. Bear, Stearns (9) | 4,599.9 | 3.7 |
| 9. Prudential-Bache (10) | 3,663.8 | 2.9 |
| 10. Kidder, Peabody (8) | 2,905.8 | 2.3 |

Source: IDD Information Services, New York
Numbers in parentheses show 1st half 1987 rankings

### Non-investment grade debt

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Drexel Burnham (1) | 5,634.7 | 46.7 |
| 2. First Boston (3) | 1,672.9 | 13.9 |
| 3. Morgan Stanley (2) | 1,392.3 | 11.5 |
| 4. Salomon (5) | 615 | 5.1 |
| 5. DLJ (6) | 506.3 | 4.2 |
| 6. Smith Barney (10) | 498.1 | 4.1 |
| 7. Goldman, Sachs (8) | 385.2 | 3.2 |
| 8. Prudential-Bache (NA) | 369.9 | 3.1 |
| 9. Merrill Lynch (4) | 325 | 2.7 |
| 10. Bear, Stearns (11) | 280.6 | 2.3 |

Source: IDD Information Services, New York
Numbers in parentheses show 1st half 1987 rankings

### Mortgage-related debt

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Goldman, Sachs (4) | 8,595.4 | 17 |
| 2. Salomon (1) | 6,494.3 | 12.8 |
| 3. First Boston (2) | 5,467.2 | 10.8 |
| 4. Merrill Lynch (3) | 5,214.4 | 10.3 |
| 5. Morgan Stanley (7) | 4,871.6 | 9.6 |
| 6. Shearson Lehman (5) | 4,542.6 | 9 |
| 7. Bear, Stearns (9) | 3,655.5 | 7.2 |
| 8. Prudential-Bache (10) | 3,120 | 6.2 |
| 9. Drexel Burnham (8) | 2,620.8 | 5.2 |
| 10. PaineWebber (21) | 1,718.5 | 3.4 |

Source: IDD Information Services, New York
Numbers in parentheses show 1st half 1987 rankings

### Initial public offerings

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Merrill Lynch (1) | 2,702 | 21 |
| 2. Shearson Lehman (5) | 2,454.3 | 19.1 |
| 3. Wheat, First Securities (2) | 2,000 | 15.6 |
| 4. PaineWebber (17) | 1,674.6 | 13 |
| 5. Prudential-Bache (11) | 1,285 | 10 |
| 6. Salomon (12) | 392.3 | 3.1 |
| 7. First Boston (9) | 384 | 3 |
| 8. Drexel Burnham (6) | 383.5 | 3 |
| 9. Goldman, Sachs (4) | 357.4 | 2.8 |
| 10. Alex. Brown & Sons (3) | 211.4 | 1.6 |

Source: IDD Information Services, New York
Numbers in parentheses show 1st half 1987 rankings

### Common stock

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Merrill Lynch (3) | 3,011.3 | 18.8 |
| 2. Shearson Lehman (2) | 2,774.1 | 17.3 |
| 3. Wheat, First Securities (5) | 2,000 | 12.5 |
| 4. PaineWebber (16) | 1,729.9 | 10.8 |
| 5. Prudential-Bache (15) | 1,357.3 | 8.5 |
| 6. Drexel Burnham (6) | 1,333.8 | 8.3 |
| 7. Salomon (10) | 653 | 4.1 |
| 8. Goldman, Sachs (1) | 615.7 | 3.8 |
| 9. First Boston (7) | 384 | 2.4 |
| 10. Smith Barney (13) | 312 | 1.9 |

Source: IDD Information Services, New York
Numbers in parentheses show 1st half 1987 rankings

### Preferred stock

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Merrill Lynch (2) | 825 | 24.2 |
| 2. Goldman, Sachs (4) | 690 | 20.2 |
| 3. First Boston (3) | 583 | 17.1 |
| 4. Salomon (8) | 353.5 | 10.4 |
| 5. Morgan Stanley (1) | 275 | 8.1 |
| 6. Shearson Lehman (5) | 216.7 | 6.3 |
| 7. Drexel Burnham (7) | 114 | 3.3 |
| 8. Oppenheimer (10) | 100 | 2.9 |
| 9. DLJ (12) | 67.4 | 2 |
| 10. Alex. Brown & Sons (NA) | 66.2 | 1.9 |

Source: IDD Information Services, New York
Numbers in parentheses show 1st half 1987 rankings

# Economists

D. Levine

R. Dederick

R. Rippe

R. Chandross

D. Bostian

*Continued from page 3*

executive vice president and chief economist for The Northern Trust Co., Chicago, said the chance of a 1988 recession was 50%. Now, the stronger-than-expected first-half showing has him predicting only a 10% chance, "just because something can always happen."

Mr. Dederick had anticipated the October market crash would have had a chilling effect on consumer spending and business investment, but "neither the consumer nor the businessman backed away as much as we thought," he said.

"They acted as if it didn't happen. They dodged from the bullet that we thought would at least hit them."

**Economic growth**

"Growth has been faster than expected," Mr. Dederick said. In December, he had predicted only a 1% real GNP growth. "The export boom and the capital spending boom gave consumers the wherewithal to increase spending at a faster rate than otherwise we thought they would be able to — and they did it," he said.

John Hekman, senior economist for Claremont Economics Institute, Claremont, Calif., said the strength of business investment was the biggest factor in the stronger-than-expected growth. The institute had predicted a 2.8% growth rate for the first half.

"For us, the most surprising development in 1988 has been the boom in business investment and how that's pulling the economy," Mr. Hekman said.

"We had said investment would help lead the economy, but it boomed more than we expected."

Richard Rippe, senior vice president and economist for Dean Witter Reynolds, New York, said a very strong improvement in net exports stemming from the lower value of the dollar, and a "big year" in capital spending — he said real business growth in the first quarter increased at a 21% annual rate — caused the economy to grow more in late 1987 and the first quarter 1988 than he had expected.

However, Mr. Rippe leans on the low end of his December prediction of a 2.5% to 3% growth for the second half of the year — now he calls for a "2% to 3%" growth for the second half because of the aging of the current business cycle and the possibility of sharp fluctuations in currency exchange rates.

Robert Chandross, vice president and chief economist of Lloyds Bank PLC, New York, said the greater-than-expected demand for credit, the moderately rising inflation rate and the willingness of the Federal Reserve Board to tighten credit should lead to higher interest rates in the second half of 1988.

While in December he had predicted rates of 6.5% and 9.35%, respectively, on 90-day Treasury bills and 30-year Treasury bonds, he is now calling for year-end rates of 7% and 9.75%.

Mr. Levine notes that even with the economy growing moderately stronger than anticipated, it is still not thundering.

"A strong economy does not mean 3% or 4% growth," he said. "Growth is very volatile historically," he said, noting that in 21% of the quarters in the past 35 years the economy grew more than 6%.

**Inflation**

Inflationary pressures through near-full capacity utilization and a tight labor supply were concerns mentioned by the economists contacted by *P&I Age*.

Mr. Levine said capacity problems and tightening labor markets were two factors leading him to call for a moderate rise in inflation, to 5.1% in the second half. In December, he predicted a 5% inflation rate for the first half, rising to 5.7% in the second half. But because the GNP did not grow during the first half at his predicted 6.7% rate, he revised downward the inflation prediction.

In December, Mr. Dederick had predicted a 4% inflation rate in both halves of the year; Mr. Dederick is now predicting a 4.6% inflation rate in the second half, after an apparent 4.5% rate the first half.

He thinks inflation will pick up, although he notes that could be offset by a continued soft oil market. "At the end of the year (1987), we thought the cyclical and inflation clocks would be set back by the market crash. They weren't," he said.

Although the Farm Belt drought was of concern to many economists, David Bostian of Bostian Research Associates, New York, said he doesn't think a continued Midwest drought would boost inflation.

"The immediate impact of the drought is deflationary rather than inflationary. It takes away from consumer spending elsewhere," he said.

Claremont's Mr. Hekman said he expects continued slow consumer spending — which he said turned down after a strong first quarter — to hold inflation down. The institute is sticking with its 3.5% inflation prediction for the second half of the year.

**Deficits**

Mr. Hekman said the lower dollar plus productivity gains should level off the trade and budget deficits.

In December, the institute expected the trade deficit in 1988 to be about $150 billion; it now is forecasting only a $135 billion deficit.

Lloyds Bank's Mr. Chandross said stronger growth abroad with the lower value of the dollar, combined with increased revenues from near-full domestic capacity utilization, bodes well for both the trade and federal deficits.

While in December he predicted a 1988 fiscal-year federal deficit of $160 billion, he said he now thinks 1988 will end with about a $155 billion deficit. The 1988 trade imbalance, which in December he had predicted would be $170 billion, is now on a target of $143 billion, he said.

Mr. Bostian said even though the dollar has rallied lately, he expects the trade deficit could even dip below $100 billion because of strong overseas demand and productivity and quality improvements by American manufacturers.

"American manufacturers are incredibly competitive," he said. "They have gotten their acts together."

Some of the economists don't expect the November presidential election to have much effect on action on the deficit.

While Lacy Hunt of Carroll, McEntee & McGinley Inc., New York, said "the big difference between George Bush and Michael Dukakis is that Bush doesn't have any expensive new programs," others thought the deficit would be confronted no matter who won.

"Whoever is elected president knows something will have to be done," said Dean Witter's Mr. Rippe, adding he is almost certain of "significant" budgetary action in 1989. "It is a question more about what we do than whether we do something about it," he said.

Added Mr. Bostian: "No matter who's elected, the deficit should come down." ■

# Swiss exchange is off to a good start

**By John Parry**

ZURICH, Switzerland — A surge of interest by institutional investors got Switzerland's fully automated options and futures exchange off to a flying start last month, despite some technical glitches.

During the first 21 days of trading — May 19 through June 17 — the Swiss Options and Futures Exchange logged 145,170 option deals, a daily average of 6,921, SOFFEX President Ernst Mollet said at a press conference. Mr. Mollet, a vice president of Swiss Bank Corp., one of the exchange's founders, said June 15 was the high mark so far, with 16,731 option deals.

Most deals were on calls rather than puts, which Mr. Mollet said was due to Swiss investors' cautious approach to the new exchange.

"But this is going to change," he said in a later interview. "One of the things that has surprised and pleased us is the way institutional investors moved into the SOFFEX market in the second half of its first month's operations. This shows that we are meeting a need."

SOFFEX, in which the major Swiss banks and the country's three stock exchanges have invested some $50 million in start-up costs, claims to be the world's first fully automated exchange. There is no trading floor, no shouted instructions and no paper — everything is handled from computer terminals in the 52 members' offices. The members now are Swiss-based banks, although foreign banks are expected to join.

The system is so successful, he said, SOFFEX is selling its software to the embryonic West German futures exchange, which hopes to be operational late this year.

"This is a logical development for us," Mr. Mollet said. "The London futures exchange is working with NASDAQ and the Amsterdam exchange with Chicago, so it's logical we would have an international link of our own."

The German link might be strengthened in the future with German stock futures and options contracts being traded on SOFFEX and vice versa, he said.

"There has always been a considerable interest by institutional investors here in German stocks, so why not eventually add them to SOFFEX," he said.

For the moment, SOFFEX trades options in 11 major Swiss securities; in the fall, it will offer options on 24 Swiss stocks. Foreign stocks "are in the pipeline," Mr. Mollet said. ■

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*June 10, 1988*

7/28/88 C2710-2

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Investment Age

Wall Street's traditional trading activities would be overhauled under a proposal for a single-price auction system by Kidder, Peabody's R. Steven Wunsch.

# Trading plan stirs debate

By Joel Chernoff

NEW YORK — R. Steven Wunsch is attempting to foment a revolution on Wall Street that will upset its revenue stream, shrink the role of market makers and ease the way for big institutions to transact their trades — and some people are listening.

Mr. Wunsch, a vice president in Kidder, Peabody & Co. Inc.'s financial futures department, proposes instituting a "single-price auction" within the operations of the New York and other major exchanges. One market participant describes the idea as "an electronic specialist book that cannot be biased."

With scads of regulators, investigators, investors and others still debating how to fix the markets after Black Monday, Mr. Wunsch's ideas are receiving new currency, particularly from institutional investors.

"I think Steve Wunsch is doing the only honest thinking on trading on the whole Street," said Theodore Aronson, a partner of Aronson & Fogler, Philadelphia.

Mr. Wunsch thinks U.S. markets need to adopt single-price auctions or risk losing out on volume to other markets as the ability to trade from remote terminals advances, global markets become more intertwined and securities products become more fungible.

Under a single-price auction system, buyers and sellers place their orders in an open book, in which everyone can see the order flow. The settlement price would be the one that matches the maximum number of buys and sells; all trades are transacted at that price. In the event of an imbalance, a re-auction would take place.

*Continued on page 38*

# Fewer firms replacing folded plans

By Carol Wiley

Incidences of corporations terminating pension plans without starting any successor plans have increased dramatically since 1985, and eventually could represent the majority of pension plan terminations.

The development is a "troubling" one, indicating the government might be fostering policies that lead corporations to "prematurely" terminate their pension plans, thereby depriving employees of their full benefits, said Roger Thomas, former counsel to the House Select Committee on Aging and now a partner in the Washington office of Bell, Boyd & Lloyd.

The impact on the capital markets, however, should be

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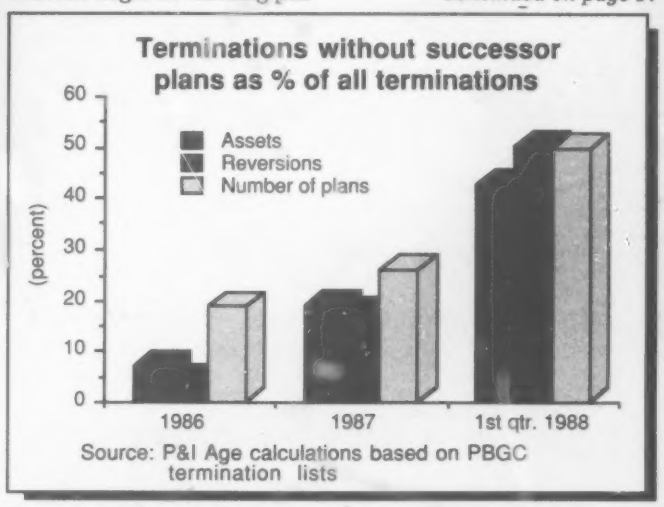


Source: P&I Age calculations based on PBGC termination lists

# Ruling voided

## Court OKs use of reversion

By Nicky Robertshaw

ATLANTA — A federal court decision that virtually would have eliminated employer reversions of surplus pension assets was overturned after being reheard in the 11th U.S. Circuit Court of Appeals.

In rehearing Blessitt vs. Dixie Engine Co., the panel of 11 judges ruled that under the Employee Retirement Income Security Act, participants in a terminating plan are not entitled to benefits they would have accrued had they remained in the plan until retirement. The decision overturns last year's ruling by a three-judge appellate panel (*Pensions & Investment Age*, Aug. 10).

"The several relevant statutes, the regulations and administrative interpretations, the case law and policy considerations all indicate that Blessitt's position is untenable," the July 8 opinion said.

The ruling involves a $225,000 reversion taken by Atlanta-based Dixie Engine Co. after paying benefits accrued up to Dec. 31, 1982, the

*Continued on page 39*

Corporate Top 100 — Page 32

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## LATE NEWS

### Barings acquires Landauer unit

NEW YORK — Landauer Associates Inc. spun off its investment management unit to one of its institutional shareholders, London-based Barings Inc.

Barings took control of the unit — Landauer Advisors Inc. — in exchange for its 31% stake in Landauer Associates. The move is part of a larger reorganization of Landauer Associates.

John Wendelboe, managing director of New York-based Barings Investment Management Holdings Inc., Barings' U.S. subsidiary that will take ownership of the Landauer unit, said discussions are under way with several institutional investors about the possibility of acquiring a controlling position in Landauer Associates. Landauer Advisors runs $752 million in real estate assets, of which $110 million is tax exempt.

### Drexel unit buy-out completed

PHILADELPHIA — The long-awaited buy-out of Drexel Burnham Lambert Inc.'s money management unit occurred July 21. The unit was acquired by present management.

James Balog, formerly vice chairman of the securities firm, is chairman, based in New York. W. Thacher Brown, formerly senior vice president of Drexel Burnham Lambert Investment Advisors, has been named president of the firm. The company, renamed 1838 Investment Advisors, has $3 billion in assets under management, including $1.4 billion in tax-exempt assets. Terms were not disclosed.

### Ironworkers protest, pull assets

CINCINNATI — Trustees of the Ironworkers District Council of Southern Ohio and Vicinity $240 million pension fund voted July 19 not to renew a $4.4 million guaranteed investment contract with the Equitable Life Assurance Society of the United States because an Equitable subsidiary hired non-union contractors for a shopping mall renovation.

Assets from the GIC, which expired July 1, will be allocated equally to two of the pension fund's balanced managers — GAMCO Investors Inc. and Dreman Value Management Inc., both in New York — according to Leroy Oberding, business agent for the Ironworkers Local 44, Cincinnati, and spokesman for the District Council. Equitable still holds $30 million in GICs for the pension fund that will be reviewed as they come due.

Equitable did not return phone calls by press time.

### PBGC grappling with LTV again

WASHINGTON — The Pension Benefit Guaranty Corp. is going another round with The LTV Corp. — this time over a much smaller pension plan that has run out of money.

LTV wants to terminate the Continental Emsco Evansville pension plan sponsored by LTV Energy Products Co. The plan has a $9.3 million unfunded liability and 300 participants and cannot afford to pay out Aug. 1 checks to retirees.

The PBGC is urging LTV to contribute the $110,000 a month necessary to keep the plan alive and continue paying full benefits.

### Funds review assets, managers

• ST. LOUIS — May Department Stores Inc. has switched its defined benefit pension plan to totally passive fixed-income and equity investments, according to a May source.

Pension fund executives at May would not comment, but the source said the plan had terminated all its active equity managers and switched to passive equity investments at the end of June. Fixed-income managers were retained, but active management was discontinued. According to the 1988 Money Management Directory May has $376 million in total pension assets.

• DANVILLE, Va. — The City Employees Retirement System of the City of Danville has hired Thompson Siegel & Walmsley, Richmond, Va., to manage about $10 million in a balanced account, according to Eleanor Hawkins, secretary of the board of directors and plan administrator.

Sovran Capital Management, Richmond, previously the $43 million fund's sole manager, retains $33 million.

• SPRINGFIELD, Ill. — The $7.1 billion Illinois Teachers' Retirement System soon will appoint two managers to overlay the fund's $500 million international portfolio with active currency management.

## DEPARTMENTS


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Vol. 16, No. 16 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1988.

## Real estate survey due

**Questionnaires for *Pensions & Investment Age*'s annual directory of real estate investment managers are due July 27.**

**For your firm to be included in the Sept. 19 directory, please return the questionnaire by July 27 to Christine Philip, directory coordinator, *Pensions & Investment Age*, 740 N. Rush St., Chicago, Ill. 60611-2590.**

**If you have any questions or have not received a questionnaire, please contact Ms. Philip at (312) 649-5217.**

# Bentsen blazed trail for Houston adviser

By Fred Williams

HOUSTON — Texan Lloyd Bentsen made his mark in the money management business more than three decades before he became the Democratic Party's nominee for vice president.

Indeed, his political success — including three terms as a U.S. senator — is grounded in a 16-year business career in Houston, where he built a diversified financial services business and helped launch one of the nation's largest investment management firms.

The Criterion Group, parent company of Criterion Investment Management Co., is an offshoot of a financial services company founded by Mr. Bentsen in 1955.

Charles Miller, president of Criterion, credited Mr. Bentsen with the firm's entry into the pension industry in 1969, when the firm was known as Funds Inc., by forming Funds Inc. Investment Advisory.

Mr. Miller had resigned his position as investment officer of the Teacher Retirement System of Texas in 1966 to join Mr. Bentsen at Texas Fund Management Co., a mutual fund management company owned by Mr. Bentsen. In 1967, Texas Fund Management became Funds Inc., and was merged into Mr. Bentsen's holding company, Lincoln Consolidated. Lincoln was a diversified financial services company with insurance as its primary business through Lincoln Liberty Life Insurance Co.

"He was one of the pioneers in the concept of a single company providing many financial services . . . a department store of finance concept. Had he stayed in business and tried to do that, he would have done it very successfully," said Mr. Miller.

Mr. Bentsen's direct involvement in the business ended when he was first elected to the Senate in 1970, Mr. Miller said, but Mr. Bentsen's family retained controlling interest in Lincoln.

In 1972, Lincoln Consolidated was sold to Illinois Central Industries, a Chicago conglomerate.

**Lloyd Bentsen is no stranger to investment management.**

Funds Inc. was spun off to Lincoln shareholders — primarily Bentsen family members — as a separate publicly held company controlled by the family, said Mr. Miller.

In 1976, Mr. Miller and a group of associates formed Criterion and acquired Funds Inc. — which had about $300 million under management, about half of which was tax exempt — from the shareholders.

Today, Criterion has almost $13 billion under management.

Mr. Miller said Mr. Bentsen has no direct connection with Criterion, although Mr. Bentsen's wife, Ann, was elected to the board of directors of Criterion's mutual funds group in 1986.

Mr. Miller is reluctant to boast of his friendship with the vice presidential nominee, but does not hesitate to express his confidence in the man, and fellow Texan, who could end up a heartbeat away from the presidency.

"It's my personal opinion that he knows more about the world financial system than anybody in U.S. government, and I mean anybody," Mr. Miller said. "He knows more from a practical and theoretical standpoint. He is very much more intellectually inclined than some people give him credit for. He studies continuously and has all his life continued to learn. I can tell that by how he talks and what he says on the occasions I do get to see him and what he does in public.

"His policies have been very pro-capital market and pro-investment. When he was chairman of the Joint Economic Committee (in the late 1970s) and even before (Ronald) Reagan came in, while (Jimmy) Carter was still president, he was talking about venture capital investments and needing more capital for the sys-

*Continued on page 35*

# Institutions rethinking board seat at Texaco

By Marcia Parker

Several proposals have been sent to Texaco Inc. management by the California Public Employees' Retirement System officials, who are negotiating a process to involve institutions directly in the nomination of members of the board of directors.

The California fund and the New York State & Local Retirement Systems have taken the lead in pursuing board representation for institutions. They obtained an agreement from Texaco management last month to involve them directly in the selection process for board members in time for the 1989 annual meeting (*Pensions & Investment Age*, June 27).

The agreement was widely interpreted to mean institutional investors would get direct board representation through at least one board seat. But Richard Koppes, counsel to the California fund, said that idea had been shelved because of serious fiduciary and liability issues.

Since the concept of insti-

*Continued on page 39*

# World tracking dollar, not vote

By Marlene Givant

Foreign institutions plotting their investment strategies are paying greater attention to the direction of the U.S. dollar than to the equally uncertain outcome of the U.S. presidential election.

Although foreign money managers, like many U.S. voters, are unclear about the policies of Gov. Michael Dukakis and Vice President George Bush, they believe regardless of who is elected, taxes will have to be raised to bridge the budget and trade deficits.

"A fair amount of problems are being put under the carpet. Whoever lifts up the carpet in November and January will have to deal with what he finds there," said Richard Katz, chairman of N.M. Rothschild International Asset Management Ltd., London.

But several managers are heartened by the U.S. dollar's recent rally and the beneficial effects a strong dollar could have on the trade deficit and interest rates. At the same time, they believe the U.S. stock market is attractively priced.

Managers bearish on the United States base their views not on the election, but on the unwillingness of the Reagan administration and the candidates to come to grips with major economic problems.

"The deficits require firm and decisive government action, which is unlikely before an election. Therefore, we're very cautious on the U.S.," said Alan McFarlane, director of the U.K. pension division of Ivory & Sime Pensions Ltd., Edinburgh, which manages $1.2 billion for non-U.S. clients. The firm's U.K. pension fund accounts, which usually have 10% to 30% in U.S. stocks, have no U.S. equities now.

N.M. Rothschild is looking to unload U.S. stocks in favor of attractively priced European stocks in such markets as France and the United Kingdom, which have their elections behind them. It also might invest temporarily in bonds, as yields in major markets worldwide have risen considerably, said Mr. Katz.

"The strongest period of economic growth is behind the U.S. Growth will almost certainly slow, if not go negative," he said.

"Neither candidate is likely to be as helpful to business and the stock market as the Reagan administration."

The U.S. election won't only affect domestic markets. J.A. Furlong, pension marketing director of Yamaichi Capital Management (Europe) Ltd., London, which runs $112 million in Japanese equities for U.K. pension funds, fears possible protectionist measures imposed under a Dukakis administration could hinder Japanese exporters.

"We're watching opinion polls like everyone else," he said. "If Dukakis gets in and restricts Japanese exports to the U.S., Japanese exporters will have to change export strategies and move into

*Continued on page 37*

INTERNATIONAL

# Investors gird for EC explosion

By Marlene Givant

International investment professionals are busily picking industries and stocks set to prosper through the lifting of European Community trade barriers by the end of 1992.

While only a few have structured their portfolios specifically to reflect the 1992 theme, almost all managers and investment analysts are focusing on Europe, knowing corporate profit margins will be squeezed and mediocre companies will disintegrate.

"1992 is an obvious exciting kicker for the whole case for investing in Europe, in addition to good valuations. . . . It's important to be in the right industries and companies because some won't survive," said Beatrice Philippe, managing director of Wertheim-Philippe International, New York, which runs $200 million for U.S. tax-exempt clients.

By Dec. 31, 1992, the EC overhaul would integrate 325 million consumers into one market (the United States has 250 million consumers); remove non-tariff trade barriers; free capital flows; make sales taxes more uniform; boost labor mobility; and open bids for government contracts. The gross domestic product would total $4.2 trillion, roughly equal to that of the United States, and the EC expects GDP to increase 4.5% by the time the plan is completed. In addition, the harmonization should add 1.8 million jobs and reduce inflation by 6%, according to EC figures.

At least a few observers think the 1992 phenomenon is being overblown and key issues involving national sovereignty have yet to be resolved. "Trying to pick winners and losers is absolutely futile," said Mark Cusack, managing director of U.K. research for Hoare Govett Ltd., London.

Still, many expect dramatic changes. At the forefront of investment planning is the prospect of increased mergers and acquisitions.

Asked to identify companies and global industries most likely to benefit from the 1992 process, 18 managers and analysts interviewed by *Pensions & Investment Age* zeroed in on large service companies, primarily in the financial services and the consumer area (*see accompanying chart*).

Insurance frequently was chosen to benefit from liberalization and bridging of price differentials, while two of the most popular sectors — advertising and food and drink — are expected to gain as pan-European brand recognition becomes important for the first time.

But there are hurdles. Alastair Ross Gooby, international strategist at James Capel & Co., London, said, "One of the great myths is that you can build up world brands."

Companies the experts picked — such as **Unilever** and **Saatchi & Saatchi** — were almost all large with the capital and foresight to expand. But, noted Hamish Parker, portfolio manager at Hill Samuel/Investment Advisers Ltd., London, "any company can benefit — small or large. The big company theme is slightly overstated." Companies not listed on exchanges also could boom, some experts said.

Managers clearly are preparing for the changes. Two-thirds of the names in Wertheim-Philippe's international portfolios are 1992-related. Matuschka-Moser Partners, Greenwich, Conn., is offering a venture capital fund to invest in companies in the United States and abroad that likely will benefit from the changes. Capital Management International of Deutsche Bank, New York, has set up a team to explore implications of 1992 for investments.

Baillie Gifford Overseas Ltd., Edinburgh, Scotland, has half of the foreign equities it invests for U.K. funds and 40% of its $130 million in U.S. pension fund money invested in the Continent — but based on valuations, not the 1992 theme. "We're not clear there are obvious portfolio conclusions to be drawn from it," said Richard Burns, partner.

But Rolf Breuer, a director of Capital Management International, expects mergers and acquisitions activity to at least double in the next four years; he said the prospect is influencing many firms' buy decisions.

Activity already is under way. In the food and beverage industry, for instance, Switzerland's Nestle S.A. acquired Britain's Rowntree PLC, and Switzerland's Jacobs Suchard S.A. acquired Belgium's Cote d'Or.

For non-EC European countries it will be "critical" to obtain a foothold, said Dorian Foyil, European research analyst at UBS-Phillips & Drew Global Research Group, London, and editor of its report, "Europe 1992: Breaking Down the Barriers." Sweden and Switzerland, for example, export to the EC more than half of the goods they produce.

Non-EC companies might buy small companies with a national presence and expand them across Europe, or buy niche companies.

The Japanese are coming, too. Andrew Smithers, senior resident director of S.G. Warburg & Co. Inc., Tokyo, sees more portfolio as well as corporate investment by the Japanese in Europe. Non-EC countries like Japan are taking a "Trojan horse" approach to the process: for example, Spain's **Motor Iberica** is a subsidiary of Nissan, said Mark Edwards, vice president of Rowe Price-Fleming International Inc., Baltimore, which runs more than $2 billion for U.S. tax-exempt clients.

The Japanese, because they are the chief among low-cost producers, should excel with the 1992 plan, said Ian Henderson, director of Wardley Investment Services International Ltd., London, which runs $65 million for U.S. tax-exempt clients. U.S. companies are

*Continued on page 31*

**1992: STOCKS TO WATCH**

| Industry | Company | Country |
|---|---|---|
| ADVERTISING & MEDIA | Agence Havas | France |
| | Maxwell Communication | U.K. |
| | Saatchi & Saatchi | U.K. |
| AIRLINES | British Airways | U.K. |
| | KLM Royal Dutch Airways | Netherlands |
| AUTOMOTIVE | Fiat | Italy |
| BANKS | Deutsche Bank | W. Germany |
| | National Westminster | U.K. |
| CONSUMER PRODUCTS | LVMH | France |
| | Philips | Netherlands |
| | Unilever | Netherlands |
| FOOD & BEVERAGE | BSN-France | France |
| | Guinness | U.K. |
| | Nestle | Switzerland |
| LEISURE | Grand Metropolitan | U.K. |
| INSURANCE | Allianz Versicherung | W. Germany |
| | Prudential | U.K. |
| TELECOMMUNICATIONS | L.M. Ericsson | Sweden |
| | Siemens | W. Germany |
| TRANSPORTATION | TNT | Australia |
| | Transport Development Group | U.K. |

Stocks listed were named by two or more analysts or portfolio managers.

# Ireland developing finance capabilities with eyes on future

By Joel Chernoff

DUBLIN, Ireland — Ireland is making its bid to become an international finance center — just in time for 1992's deregulation of European trade and financial barriers.

Proponents are touting the new International Financial Centre, being constructed in a previously run down section of Dublin, because of its low-cost advantages to other European locations. Like Luxembourg and Paris, they hope to develop a niche for Dublin in the European financial community.

Thirty-eight companies, including Citicorp and Chase Manhattan Corp., have applied for licenses to operate in the center, which is scheduled to open next year. While most of the companies are setting up business in large-ticket leasing and asset financing, center officials now are focusing on attracting European and U.S. money management operations.

Officials hope low costs, a special 10% corporate income tax rate, modern telecommunications systems and a skilled population will lure financial services companies to Dublin.

"We're really a nation of horse traders, but we've brought our horse-trading skills into the 20th century," said John C. Corrigan, director and investment manager of Allied Irish Investment Managers, Dublin, which manages $2.5 billion in assets. The subsidiary of Allied Irish Bank is a tenant.

Liberalization of European barriers on movement of capital and trade in 1992 will aid the center, proponents hope. New rules lifting barriers on unit trusts — making it possible to set up operations and market anywhere in the European Community — go into effect next year.

Even last October's stock market fall seems to be working in the center's favor, as companies have become more cost conscious, said P.J. Daley, executive vice president of the Irish Development Authority, Dublin, the firm marketing the center.

While the main sources of business are expected to come from leasing, asset financing and money management, the center also is touted as being attractive for corporate treasury management using multicurrency techniques.

Overseas companies can keep their accounts in currencies of their choice for tax purposes, an unusual feature, noted David P. Hanna, executive vice president of the Irish Development Authority. Irish subsidiaries of Digital Equipment Corp. and Texaco Inc. have signed up as tenants.

Wang Laboratories Inc.'s worldwide leasing operation also signed a lease in the 750,000-square-foot International Financial Services Centre, which officials believe can accommodate a wide array of financial activities, including money management, treasury management, banking, securities trading, insurance and back-office operations.

Other tenants include a Citicorp-affiliated securities firm, Gandon Holding PLC; British & Commonwealth Group, London, one of Britain's largest financial services firms; James Capel & Co., London, a British securities broker; and Krediet-bank, Brussels, a Belgian bank. Also, Allied Irish Bank and Bank of Ireland have committed to 150,000 and 60,000 square feet, respectively.

**The International Financial Centre, part of Dublin's Custom House Docks Development shown here, enhances Ireland's stature in European finance.**

The financial center, scheduled to take in its first tenants in September 1989, is the first phase of the $500 million Custom House Dock Development. In five years, the development will include an international trade center, four other office buildings, a hotel and conference center, and retail and residential buildings. One million square feet is expected to become available during the first two years, of which 400,000 square feet is committed.

Located beside the 18th century Dublin Custom House on the River Liffey, the project was designed by Benjamin Thompson & Associates, Cambridge, Mass., ar-

*Continued on page 30*

# EC explosion

*Continued from page 29*

expected to wait for a stronger dollar before they accelerate European expansion.

As long as the EC policy on cross-border acquisitions remains unclear, activity is sure to increase. Most acquisitions are expected to take place where they are restricted least — in the United Kingdom, France and Spain.

Managers and analysts mentioned a wide list of takeover targets. Dominic Freud, senior international equity analyst at Banque Paribas Capital Markets, New York, said, "Almost any company with an interesting marketing position or an interesting brand which is not particularly enormous would be viewed as a potential target."

Many experts expect French beverage companies **Perrier** and **Pernod Ricard** and Italian paper company **Cartier Burgo** to be taken over.

Mr. Foyil mentioned **Jaguar** (when the U.K. government's "golden share" in the company expires in 1991, allowing foreign control) as a target; Mr. Burns of Baillie Gifford cited U.K. financial service company **Morgan Grenfell** as well as **Sun Life Assurance**, because it is held by many Australians, who are aggressive raiders.

Peter Chambers, vice president and head of European equities at Citicorp, which manages more than $100 million for U.S. tax-exempt clients, thinks the Spanish chemical company **Energia & Industrias Aragonesas** and **Royal Bank of Scotland** are likely targets.

Rowe Price-Fleming's Mr. Edwards cited **Feldmuehle Nobel**, a German materials and commodities company, and **Arjomari-Prioux**, a French forest products and paper company. His holdings include small companies — such as **Elsevier**, a Dutch publishing company and **Vallerhemoso**, a Spanish property company — he thinks will seek strong partners.

Despite the opportunities, the 1992 plan is met with ample skepticism. Key issues include whether the EC countries will adopt a single currency, a central bank and coordination of fiscal policies.

Hoare Govett's Mr. Cusack said harmonization is "not in politicians' own interests since they are essentially voting away their own reason for existence."

Also, less than one-third of the 300 directives due to be completed by year-end 1992 are in the works and few believe all will be ready by the deadline.

Practical concerns include the willingness of workers to move around and feasibility of looser border controls. "They could give a free reign to terrorism or soccer hooligans — how do you deal with that?" asked Henry de Vismes, managing director, Kleinwort Benson International Investment Ltd., London.

Governments still will resist foreign takeovers, as was the case in Carlo de Benedetti's failed attempt to take over Belgium's Societe General, said Philippe Piete, senior partner of World'Vest Base Ltd., Three Oaks, Mich. Restructuring through takeovers also will be difficult as EC companies might take cross-holdings in each other to prevent hostile raids.

Another obstacle includes governance of the huge market. "Who will manipulate that one rulebook (for the EC)? You could end up with each country's strictest rules," Hill Samuel's Mr. Parker said. ■

*Foreign Editor Joel Chernoff in New York and Paul Montgomery, Brussels, Belgium, also contributed to this story.*

Profiles of the leading consultants in the investment management industry will be appearing in the Oct. 17 issue of *Pensions & Investment Age*.

**Managers ranked by total tax-exempt assets in international and global accounts**
**(as of March 31)**

| Firm | ($ millions) |
|---|---|
| 1. State Street Bank | 4,031 |
| 2. J.P. Morgan | 2,726 |
| 3. Capital Guardian | 2,701 |
| 4. Morgan Grenfell | 2,684 |
| 5. First Chicago | 2,314 |
| 6. Templeton International | 2,076 |
| 7. Rowe Price-Fleming | 2,057 |
| 8. Grantham Mayo Van Otterloo | 1,981 |
| 9. Batterymarch | 1,960 |
| 10. Baring International | 1,902 |
| 11. Fidelity International | 1,825 |
| 12. Schroder Capital | 1,736 |
| 13. Worldinvest | 1,424 |
| 14. Warburg Investment | 1,324 |
| 15. N.M. Rothschild | 1,221 |
| 16. Nomura Capital | 1,141 |
| 17. PCM International | 985 |
| 18. Wells Fargo | 971 |
| 19. Citicorp Investment | 806 |
| 20. Oechsle International | 743 |
| 21. Posthorn Global | 672 |
| 22. Brown Brothers Harriman | 646 |
| 23. G.T. Capital | 628 |
| 24. Mellon-Pictet | 611 |
| 25. Julius Baer | 610 |
| 26. Bankers Trust | 607 |
| 27. Alliance Capital | 602 |
| 28. IDS International | 566 |
| 29. Scudder, Stevens & Clark | 565 |
| 30. Fiduciary Trust* | 560 |
| 31. Kemper-Murray Johnstone | 496 |
| 32. Daiwa International | 481 |
| 33. ABD International | 359 |
| 34. Arnhold & S. Bleichroeder | 320 |
| 35. Capital Mgmt. International | 261 |
| 36. Martin Currie | 260 |
| 37. Chase Investors International | 250 |
| 38. SBC Portfolio Mgmt. | 249 |
| 39. Wellington International | 245 |
| 40. Beutel, Goodman | 241 |
| 41. Putnam Advisory | 239 |
| 42. Walter Scott | 237 |
| 43. Hill Samuel/Investment | 228 |
| 44. American National Bank | 221 |
| 45. Lombard Odier | 217 |
| 46. Bessemer Group* | 190 |
| 47. Boston International | 181 |
| 48. Massachusetts Financial | 175 |
| 49. Wertheim-Philippe | 171 |
| 50. Boston Co. | 167 |
| 51. Chemical Investment | 162 |
| 52. Kleinwort Benson | 154 |
| 53. Dimensional Asset | 150 |
| 54. Travelers | 150 |
| 55. Centerre Trust | 146 |
| 56. Baillie Gifford Overseas | 140 |
| 57. CIGNA Asset | 131 |
| 58. BEA Associates | 127 |
| 59. County NatWest | 125 |
| 60. Ivory & Sime International | 125 |
| 61. Nikko & Associates | 122 |
| 62. Capital Research & Mgmt. | 118 |
| 63. Credit Suisse Asset | 117 |
| 64. Marvin & Palmer Associates | 90 |
| 65. Van Eck | 86 |
| 66. Matuschka Moser Partners | 85 |
| 67. BZW Investment Management | 82 |
| 68. Wardley Investment Services | 64 |
| 69. Babson-Stewart Ivory | 55 |
| 70. Equitable Capital | 54 |
| 71. Fidelity Mgmt. Trust | 52 |
| 72. Key/Dunedin Worldwide | 52 |
| 73. Provident Capital | 40 |
| 74. Foreign & Colonial Asset | 33 |
| 75. First RepublicBank Asset | 25 |
| 76. Emerging Markets Investors | 24 |
| 77. Simms Capital | 24 |
| 78. Morgan Stanley Asset | 14 |
| 79. HD International | 11 |
| 80. Touche Remnant Investment | 8 |
| TOTAL | 50,431 |

*as of Dec. 31

This is a complete list of the management firms with international/global assets under management that responded to the Top 50 survey in the June 27 issue.

OUR VIEW OF INVESTING OUTSIDE AMERICA

Following the period of retrenchment in the wake of the October crash, fund managers in America are once again looking overseas. But performance in the different markets has not been uniform in either equities or bonds. With the help of James Capel, a global investment house with close to 200 analysts covering 5000 companies on 25 stock markets around the world, institutional investors have more access to more international opportunities than ever before. The benefits associated with diversifying investments internationally are familiar to the experienced fund managers. Risk is spread and as the selection of stocks is increased, so too are the opportunities.

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# P&I Age Corporate Top 100

| Company | ABO | PBO | Plan assets | Plan assets in excess (less than) PBO | Actual return (loss) on plan assets | Net periodic pension expense (income) | Pension expense as a % of adjusted net income | Plan assets as a % of corporate assets | ABO as a % of shareholders equity |
|---|---|---|---|---|---|---|---|---|---|
| Aetna | 818.2 | 1,235.0 | 1,481.0 | 246.0 | 129.7 | (5.5) | 0.60 | 2.04 | 1.12 |
| Alcoa OP | 2,261.5 | 2,399.0 | 2,371.5 | -27.5 | 237.3 | 80.8 | -26.76 | 23.95 | 57.83 |
| Alcoa UP | 29.9 | 37.6 | 8.6 | -29.0 | NA | — | — | — | — |
| Allegis OP | 1,002.8 | 1,299.7 | 1,536.3 | 236.6 | 93.4 | 127.3 | -27.53 | 18.68 | 34.32 |
| Allegis UP | 189.2 | 384.7 | 90.6 | -294.6 | — | — | — | — | — |
| Allied Signal OP | 1,809.0 | 2,081.0 | 2,500.0 | 419.0 | 115.0 | 55.0 | -7.74 | 24.45 | 57.81 |
| Allied Signal UP | 1,364.0 | 1,593.0 | 1,342.0 | -251.0 | NA | NA | — | — | — |
| American Air | 1,401.5 | 1,678.1 | 1,558.9 | -119.2 | -76.7 | 53.6 | -21.27 | 18.51 | 49.50 |
| American Brands OP | 435.1 | 590.7 | 906.3 | 315.6 | 172 | 4.9 | 0.93 | 12.34 | 13.66 |
| American Brands UP | 400.5 | 446.7 | 354.4 | -92.3 | NA | NA | — | — | — |
| American Electric | 660.2 | 829.6 | 989.0 | 159.4 | 60.5 | (3.0) | 0.60 | 70.55 | 16.29 |
| Ameritech | 6,156.2 | 6,753.7 | 9,748.9 | 2,995.2 | 360.0 | 84.7 | -7.67 | 51.90 | 80.89 |
| Amoco | 1,583.0 | 1,899.0 | 2,277.0 | 378.0 | 173.0 | 43.0 | -3.06 | 9.17 | 13.08 |
| Armco | 1,727.0 | 1,932.0 | 1,514.0 | -417.8 | 72.9 | 85.9 | -42.21 | 54.33 | 233.82 |
| AT&T | 16,484.0 | 17,696.0 | 26,590.0 | 8,894.0 | 1,412.0 | (316.0) | 18.29 | 69.20 | 114.04 |
| Atlantic Richfield OP | 1,266.0 | 1,406.0 | 2,086.0 | 680.0 | 139.0 | 0 | 0 | 9.20 | 21.54 |
| Atlantic Richfield UP | 186.0 | 192.0 | 0 | -192.0 | 0 | NA | — | — | — |
| BATUS OP | 646.6 | 779.1 | 885.4 | 106.3 | 44.8 | 15.0 | -3.12 | 19.09 | 35.04 |
| BATUS UP | 41.3 | 50.8 | 14.1 | -36.7 | NA | — | — | — | — |
| Bell Atlantic | 6,737.4 | 8,071.7 | 8,629.6 | 557.9 | 298.2 | 146.8 | -10.64 | 40.62 | 77.07 |
| BellSouth | 6,388.1 | 7,816.2 | 8,226.0 | 409.8 | 407.7 | 154.4 | -8.49 | 30.00 | 53.33 |
| Bethlehem Steel | 3,937.4 | 4,032.0 | 2,312.4 | 1,719.6 | 59.8 | 207.6 | -54.36 | 48.43 | 325.84 |
| Boeing | 3,749.0 | 4,766.0 | 5,174.0 | 408.0 | 353.0 | 132.0 | -21.57 | 41.17 | 75.16 |
| Burlington Northern | 785.5 | 947.4 | 824.8 | -122.6 | 60.8 | 36.3 | -8.96 | 7.53 | 20.77 |
| Caterpillar | 2,527.0 | 2,750.0 | 3,219.0 | 469.0 | 5.0 | 10.0 | -2.78 | 71.95 | 70.88 |
| Chevron OP | 2,546.0 | 2,895.0 | 3,639.0 | 744.0 | 308.0 | 24.0 | -2.44 | 10.56 | 16.13 |
| Chevron UP | 108.0 | 117.0 | 0 | 117.0 | — | NA | 117.00 | 0 | 117.00 |
| Chrysler | 6,381.8 | 6,436.5 | 3,646.2 | -2,790.3 | -163 | 470.3 | -26.72 | 18.28 | 98.14 |
| CIGNA OP | 644.7 | 917.8 | 981.3 | 63.5 | 16.9 | 37.3 | -4.87 | 1.83 | 12.34 |
| CIGNA UP | 17.8 | 27.3 | 6.3 | -21.0 | NA | NA | — | — | — |
| Citicorp | 250.0 | 591.0 | 912.0 | 321.0 | 4.0 | (9.0) | -0.80 | 0.45 | 2.84 |
| Commonwealth Edison | 1,257.0 | 1,533.0 | 1,766.0 | 233.0 | 102.0 | 6.0 | -0.55 | 9.72 | 17.91 |
| Consolidated Edison | 1,788.0 | 2,368.0 | 2,333.0 | -35.0 | 143.3 | 57.5 | -9.46 | 24.86 | 44.62 |
| Deere OP | 879.0 | 1,113.0 | 1,209.0 | 96.0 | -58.0 | (35.0) | -54.69 | 25.40 | 45.78 |
| Deere UP | 910.0 | 948.0 | 834.0 | -114.0 | NA | NA | — | — | — |
| Delta Air Lines | 1,853.4 | 2,620.3 | 2,637.5 | 17.2 | 359.5 | 89.7 | -25.37 | 49.37 | 95.64 |
| Digital Equipment | 368.6 | 1,054.8 | 1,354.2 | 299.3 | 187.5 | 100.4 | -8.11 | 16.11 | 5.86 |
| Dow Chemical | 1,730.0 | 1,973.0 | 2,007.0 | 34.0 | 142.0 | 85.0 | -25.68 | 13.98 | 29.99 |
| Du Pont | 6,381.0 | 7,324.0 | 11,624.0 | 4,300.0 | 824.0 | (207.0) | 13.11 | 41.21 | 44.80 |
| Eastman Kodak | 3,095.0 | 3,967.0 | 5,269.0 | 1,302.0 | 308.0 | (130.0) | 12.40 | 36.46 | 51.47 |
| Eaton OP | 639.3 | 731.9 | 799.9 | 68.0 | 33.6 | 14.2 | 197.50 | 26.43 | 59.41 |
| Eaton UP | 152.6 | 164.6 | 74.2 | -90.4 | NA | NA | — | — | — |
| Exxon | 3,111.0 | 3,541.0 | 4,764.0 | 1,223.0 | 178.0 | (33.0) | 0.70 | 6.86 | 9.72 |
| Florida Power | 359.8 | 563.4 | 1,023.3 | 459.9 | 27.3 | 0 | 0 | 10.25 | 11.62 |
| Ford OP | 5,467.9 | 6,139.9 | 8,205.6 | 2,065.7 | 884.0 | 354.7 | -8.30 | 18.25 | 29.57 |
| Ford UP | 6,136.0 | 6,238.2 | 5,233.0 | -1,005.2 | NA | NA | — | — | — |
| GenCorp | 1,111.0 | 1,149.0 | 1,237.0 | 88.0 | 7.0 | 14.0 | -2.66 | 111.64 | -1,145.36 |
| General Dynamics OP | 2,240.8 | 2,527.8 | 2,916.2 | 388.4 | 165.6 | 70.2 | -13.85 | 57.96 | 139.96 |
| General Dynamics UP | 106.0 | 106.0 | 90.9 | -15.1 | NA | NA | — | — | — |
| General Electric | 13,176.0 | 15,494.0 | 20,088.0 | 4,594.0 | 1,237 | 25.0 | -0.85 | 51.61 | 79.95 |
| General Motors OP | 30,325.8 | 31,710.9 | 38,521.5 | 6,810.6 | 7,436.6 | (810.5) | 18.56 | 44.06 | 91.27 |
| General Motors UP | 50.2 | 111.2 | 0 | -111.2 | NA | NA | — | — | — |
| Goodyear OP | 1,026.7 | 1,113.9 | 1,519.2 | 405.3 | 32.1 | (5.5) | 0.72 | 18.09 | 55.98 |
| Goodyear UP | 106.1 | 138.9 | 55.2 | -83.7 | NA | NA | — | — | — |
| Grumman | 1,295.2 | 1,519.1 | 1,842.6 | 323.4 | 81.3 | 29.5 | -45.38 | 81.75 | 178.06 |
| GTE | 3,700.0 | 5,609.0 | 8,254.0 | 2,645.0 | 729.4 | 16.2 | -1.52 | 28.71 | 40.74 |
| John Hancock | 333.8 | 482.8 | 647.6 | 164.8 | NA | (4.2) | — | — | — |
| Johnson & Johnson | 500.0 | 728.0 | 932.0 | 204.0 | 62 | 25.0 | -2.91 | 14.24 | 14.35 |
| Hercules | 618.6 | 720.0 | 1,055.1 | 335.1 | 75.2 | (23.1) | 2.90 | 30.21 | 28.26 |
| Honeywell OP | 1,108.6 | 1,258.7 | 1,506.2 | 247.5 | 345 | 45.1 | -15.08 | 28.50 | 49.38 |
| Honeywell UP | 422.7 | 445.3 | 370.6 | -74.7 | NA | NA | — | — | — |
| GM Hughes | 1,991.6 | 2,423.2 | 3,444.6 | 1,021.4 | 260 | (51.4) | 10.94 | 30.96 | 28.17 |
| IBM | 9,351.0 | 14,185.0 | 18,070.0 | 3,885.0 | 846 | (142.0) | 2.78 | 28.37 | 24.44 |

**Definitions**

**ABO: Accumulated benefit obligation. The value of all benefits earned to date, including nonvested as well as vested benefits.**

**PBO: Projected benefit obligation. A measure of the liability for accumulated service reflecting future salary increases.**

**OP: Overfunded plan**

**UP: Underfunded plan**

**Source: Company annual reports**

# Large funds in good health

By Brad Rudin

About two-thirds of the nation's 100 largest corporate pension plans are overfunded on an ongoing basis, according to a *Pensions & Investment Age* survey of 1987 annual reports.

The survey results actually minimize the extent of overfunding because several corporations sponsor both large overfunded and small underfunded plans. Pension accounting rules require a separate display of data for the overfunded and underfunded plans.

For example, General Motors Corp.'s overfunded plans have a $31.7 billion projected benefit obligation and assets of $38.5 billion, while the underfunded plans have a projected benefit obligation of $111.2 million and no assets.

The average plan in the *P&I Age* Corporate Top 100 had accumulated benefit obligations of $2.1 billion, projected benefit obligations of $2.4 billion and assets of $2.9 billion.

The accumulated benefit obligation is the value of all benefits earned to date, including nonvested as well as vested benefits. The projected benefit obligation is a measure of the liability for accumulated service reflecting future salary increases.

The five most highly funded plans, measured according to the amount of plan assets in excess of the projected benefit obligation, are sponsored by American Telephone & Telegraph Co., General Motors, E.I. du Pont de Nemours & Co., IBM Corp. and American Information Technologies Corp.

"Pension plans are considerably better off today than when this administration took office," said David M. Walker, assistant secretary of labor for pension and welfare benefits. About 80% of the plans were overfunded in January, compared with 59% in January 1981, he said.

The surge in the capital markets made possible by Reagan administration economic policy is the primary cause of the sound funding status, he said.

"Nothing will help pension plans as much as a fabulous equity market," said Jeremy Gold, a principal at Morgan Stanley Pensions, New York. "The best thing for the health of pension plans is a healthy American economy."

Still, legislative change could reduce the surplus that has been built up during the 1980s.

The Omnibus Budget Reconciliation Act of 1987 seems likely to reduce the surplus in overfunded plans because of a provision that sets the full funding limit at the lesser of the actuarial liability or 150% of accrued liabilities. The legislation also requires increased minimum funding requirements and increased Pension Benefit

Guaranty Corp. premiums for underfunded plans, provisions that should reduce the amount of unfunded liabilities.

"The new (funding) limitation trims back the surplus pension plans can accumulate," said Louis Kingsland, a senior vice president at Callan Associates, San Francisco. Plans that are well funded could become underfunded if their OBRA-reduced cushion were exposed to deteriorating capital markets, Mr. Kingsland said.

"Some amount of deterioration is inevitable because (plan sponsors) are not making contributions for the most part," said Lawrence Bader, a vice-president in the asset allocation group at Salomon Brothers Inc., New York. "I'd still say they are in excellent health. I'm not trying to pronounce the coming of doomsday."

The future funded status of corporate retirement plans depends in large measure on congressional willingness to continue tax-deductible pension contributions, said Samuel W. Halpern, an executive vice president at Bear Stearns Fiduciary Services Inc., New York. Federal budget deficits create a great temptation to raise revenue by further shrinking the tax-deductibility of pension contributions, he continued.

A resurgence of inflation and a faltering economy could shrink surplus pension assets in the not-too-distant future, said Roger Bransford, a consultant at Towers, Perrin, Forster & Crosby, Atlanta. "There's nothing to suggest that those kinds of things could not happen again."

The Department of Labor is studying the implications of OBRA's full funding limit, Mr. Walker said, adding that while the department supports the principle of a funding limit, it is not sure Congress acted wisely in setting the limit.

Bear markets do not pose a serious threat to overfunded plans even with the full funding limit, Mr. Walker said. "It's unlikely that market fluctuations would erode that cushion."

Review of the pension footnotes in corporate annual reports showed few of the top 100 plans posted an actual loss on assets. Loss or gain on assets — a component of pension expense — includes investment income as well as realized gains and losses from the sale of securities and the unrealized appreciation and depreciation of assets.

GM, with a $7.4 billion return, reported the largest gain on investments in the *P&I Age* Corporate Top 100. AT&T's $26.6 billion plan reported an actual gain of $1.4 billion, giving the company second place in return on assets. General Electric Co., sponsor of a $20 billion plan, came in third with $1.2 billion.

Even with investment gains, almost two-thirds of the companies in the Top 100 reported pension expense. Du Pont, however, booked pension income of $207 million while AT&T reported pension income of $316 million.

The companies surveyed were drawn from *P&I Age*'s annual profiles of the nation's 1,000 largest pension funds. Elimination of non-corporate plans, with adjustments for mergers and acquisitions, produced the *P&I Age* Corporate Top 100. ■

# P&I Age Corporate Top 100

| Company | ABO | PBO | Plan assets | Plan assets in excess (less than) PBO | Actual return (loss) on plan assets | Net periodic pension expense (income) | Pension expense as a % of salaried net income | Plan assets as a % of corporate assets | ABO as a % of shareholders equity |
|---|---|---|---|---|---|---|---|---|---|
| Inland Steel | 1,055.0 | 1,146.0 | 1,427.0 | 281.0 | 77 | (13.0) | 9.85 | 53.83 | 75.84 |
| Int'l Paper OP | 1,063.0 | 1,096.0 | 1,689.0 | 593.0 | 238 | (44.0) | 12.12 | 19.39 | 26.23 |
| Int'l Paper UP | 28.0 | 29.0 | 23.0 | −6.0 | NA | NA | — | — | — |
| ITT | 1,593.0 | 1,853.0 | 1,796.0 | −54.0 | 113.7 | 158.6 | −13.47 | 13.45 | 20.37 |
| James River OP | 665.3 | 689.1 | 752.8 | 66.7 | 126.8 | 2.3 | −1.34 | 17.88 | 38.08 |
| James River UP | 235.9 | 236.4 | 162.4 | −73.8 | — | — | — | — | — |
| K mart | 576.0 | 762.0 | 897.0 | 135.0 | 40 | 16.0 | −0.47 | 8.08 | 13.06 |
| Kraft | 626.0 | 767.9 | 1,144.6 | 376.7 | 123.1 | (12.6) | 2.86 | 20.86 | 32.98 |
| Eli Lilly | 784.9 | 1,015.9 | 1,141.5 | 125.6 | 91.8 | 28.9 | −4.29 | 21.72 | 25.79 |
| Lockheed | 2,864.0 | 3,276.0 | 4,606.0 | 1,330.0 | 227.0 | (19.0) | 4.73 | 73.10 | 137.23 |
| Martin Marietta | 1,069.1 | 1,385.5 | 1,866.8 | 481.3 | 117.2 | 73.9 | −24.23 | 66.81 | 117.74 |
| McDonnell Douglas | 2,971.0 | 3,328.0 | 4,474.1 | 1,146.1 | −123.7 | (112.5) | 53.57 | 52.41 | 100.03 |
| Merck | 667.3 | 824.4 | 1,052.2 | 227.8 | 82.1 | (1.3) | 0.14 | 18.52 | 31.52 |
| Metropolitan Life | 937.0 | NA | 1,369.0 | NA | NA | NA | — | 1.55 | — |
| Minnesota Mining OP | 1,328.0 | 1,555.0 | 2,035.0 | 480.0 | 120.0 | 12.0 | −1.29 | 25.39 | 26.25 |
| Mobil | 2,085.0 | 2,494.0 | 2,717.0 | 223.0 | 118.0 | 33.0 | −2.56 | 6.60 | 12.42 |
| Monsanto | 2,278.0 | 2,615.0 | 3,118.0 | 503.0 | 187.0 | 7.0 | −1.58 | 36.88 | 58.40 |
| RJR Nabisco OP | 1,247.0 | 1,683.0 | 1,707.0 | 24.0 | 89.0 | 74.0 | −6.88 | 10.12 | 20.65 |
| RJR Nabisco UP | 904.0 | 914.0 | 676.0 | −238.0 | NA | NA | — | — | — |
| Navistar | 2,352.0 | 1,644.0 | 1,927.0 | 283.0 | NA | 54.0 | −62.07 | 101.31 | 365.79 |
| Northrop OP | 1,222.5 | 1,564.2 | 2,101.7 | 537.5 | 114.0 | 6.0 | −6.00 | 67.28 | 128.96 |
| Northrop UP | 33.5 | 37.7 | 7.1 | −30.6 | NA | NA | — | — | — |
| Northwest Air | 561.9 | 750.3 | 825.1 | 74.8 | 89.2 | 32.0 | −23.70 | 19.56 | 36.89 |
| NYNEX | 6,945.0 | 8,658.0 | 10,431.0 | 1,773.0 | 340.0 | 109.0 | −7.86 | 45.78 | 75.51 |
| Owens Illinois | 1,149.3 | 1,369.9 | 1,633.3 | 263.4 | 143.9 | (25.9) | −40.47 | 36.15 | 904.96 |
| PG&E | 1,647.5 | 2,386.3 | 2,205.1 | −181.1 | 89.0 | 101.3 | −17.26 | 10.15 | 22.72 |
| Pacific Telesis | 5,531.0 | 6,558.0 | 8,045.0 | 1,487.0 | 598.0 | 162.0 | −15.13 | 38.21 | 70.10 |
| JC Penney | 688.0 | 934.0 | 1,071.0 | 137.0 | 78.0 | (8.0) | 1.33 | 9.88 | 16.49 |
| Philadelphia Electric | 650.1 | 1,044.6 | 1,056.4 | 11.7 | 41.9 | 29.5 | −5.75 | 9.42 | 19.19 |
| Philip Morris | 1,860.0 | 2,421.0 | 2,936.0 | 515.0 | 148.0 | 13.0 | −0.70 | 15.34 | 27.26 |
| Prudential | 2,120.0 | NA | 3,892.0 | NA | NA | 8.0 | −0.91 | 2.76 | — |
| Raytheon OP | 878.2 | 1,150.9 | 1,332.2 | 181.2 | 54.1 | 49.2 | −9.96 | 32.80 | 47.50 |
| Raytheon UP | 395.8 | 397.9 | 353.8 | −44.1 | NA | NA | — | — | — |
| Rockwell OP | 3,668.4 | 4,185.2 | 6,377.3 | 2,192.1 | 1,004.9 | (164.4) | 34.90 | 72.98 | 100.69 |
| Rockwell UP | 521.9 | 536.2 | 430.6 | 105.6 | — | — | — | — | — |
| Sears OP | 2,582.0 | 3,336.0 | 4,205.0 | 869.0 | 199.1 | 123.2 | −6.95 | 5.61 | 19.00 |
| Sears UP | 195.0 | 251.0 | 143.0 | −108.0 | NA | NA | — | — | — |
| Shell Oil | 2,195.0 | 2,534.0 | 2,888.0 | 354.0 | 136.0 | 24.0 | −1.91 | 10.72 | 14.79 |
| SoCal Edison | 858.3 | 1,230.3 | 1,201.0 | −28.8 | 130.7 | 53.6 | −7.26 | 8.45 | 17.09 |
| Southern Co. | 893.7 | 1,536.4 | 1,708.2 | 171.8 | 63.5 | 43.5 | −7.29 | 8.91 | 14.48 |
| So. NE Telephone | 853.7 | 930.4 | 1,293.7 | 363.3 | 94.1 | 6.4 | −4.41 | 46.72 | 79.05 |
| Southwestern Bell | 3,692.9 | 3,831.6 | 5,678.6 | 1,847.0 | 166.9 | (103.7) | 9.93 | 26.41 | 45.06 |
| Sun Oil OP | 1,233.0 | 1,407.0 | 1,581.0 | 174.0 | 125.0 | 2.0 | −0.57 | 12.57 | 23.58 |
| Sun Oil UP | 178.0 | 190.0 | 52.0 | −138.0 | NA | NA | — | — | — |
| Teledyne | 594.7 | 700.7 | 1,356.2 | 655.5 | 63.5 | (30.0) | 8.65 | 43.26 | 30.10 |
| Tenneco OP | 1,076.0 | 1,318.0 | 2,438.0 | 1,120.0 | 411.0 | (36.0) | −14.17 | 13.18 | 28.52 |
| Tenneco UP | 261.0 | 262.0 | 182.0 | −80.0 | NA | NA | — | — | — |
| Texaco | 810.0 | 1,284.0 | 1,450.0 | 166.0 | 92.0 | 51.0 | 1.17 | 4.27 | 8.83 |
| Textron | 1,172.0 | 1,370.0 | 1,852.0 | 482.0 | 149.6 | 10.4 | −3.90 | 34.66 | 50.80 |
| TRW | 1,187.0 | 1,490.0 | 1,790.0 | 300.0 | 135.0 | 14.0 | −5.45 | 40.89 | 83.77 |
| TWA OP | 41.7 | 42.7 | 52.2 | 9.5 | 90.6 | 28.5 | −36.06 | 1.24 | 14.28 |
| TWA UP | 1,193.7 | 1,202.4 | 1,135.2 | NA | NA | NA | — | — | — |
| Travelers | 854.5 | 1,183.8 | 1,203.3 | 19.5 | 75.8 | 14.1 | −3.63 | 2.40 | 17.82 |
| Union Carbide | 1,279.0 | 1,650.0 | 1,628.0 | −22.0 | 20.0 | 28.0 | −10.77 | 20.63 | 102.57 |
| Unisys OP | 1,959.0 | 2,497.0 | 2,528.6 | 31.6 | 103.4 | (31.2) | 7.11 | 25.39 | 43.11 |
| Unisys UP | 89.5 | 94.2 | 44.9 | −49.3 | NA | NA | — | — | — |
| United Tech OP | 3,454.1 | 4,260.3 | 5,768.3 | 1,508.0 | 1,075.3 | 9.0 | −1.55 | 48.36 | 80.50 |
| United Tech UP | 336.2 | 442.2 | 222.2 | −219.9 | NA | NA | — | — | — |
| United Telecom | 488.4 | 675.2 | 941.3 | 266.1 | 27.1 | 18.1 | 54.85 | 14.35 | 32.01 |
| U S WEST | 3,725.0 | 4,685.0 | 6,575.0 | 1,890.0 | 486.1 | (16.1) | 1.63 | 34.43 | 49.96 |
| USX | 7,570.0 | 7,974.0 | 8,527.0 | 553.0 | 618.0 | (242.0) | −1,052.17 | 43.60 | 136.91 |
| Westinghouse | 4,232.0 | 4,677.3 | 3,629.5 | −1,047.8 | 18.1 | 111.7 | −13.16 | 36.47 | 118.34 |
| Warner Lambert | 599.8 | 669.9 | 719.1 | 49.2 | −25.9 | (24.1) | 8.87 | 29.03 | 68.63 |
| Unocal | 528.0 | 635.0 | 853.0 | 218.0 | 58.0 | (44.0) | 32.00 | 8.40 | 29.90 |

**Definitions**

**ABO: Accumulated benefit obligation. The value of all benefits earned to date, including nonvested as well as vested benefits.**

**PBO: Projected benefit obligation. A measure of the liability for accumulated service reflecting future salary increases.**

**OP: Overfunded plan**

**UP: Underfunded plan**

**Source: Company annual reports**

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PENSIONS & Annuities (1988)

# InvestmentAge

The newspaper of corporate and institutional investing $4.00 an issue • $90 a year

# Stock issue cuts liability

## Bethlehem boosts fund

By Curtis Vosti

BETHLEHEM, Pa. — Bethlehem Steel Corp. has gone on the attack against its huge pension liability and used much of the proceeds of a common stock offering to fund a $250 million contribution to the company's pension fund.

The nation's third-largest steelmaker, buoyed by strong investor interest and an upsurge in business, is aiming to reduce by more than 30% the $1.6 billion in unfunded accrued benefit obligations with which it began the year.

The unfunded accrued benefit obligation is the amount by which the company's pension fund would be underfunded if all of its 35,000 employees retired this year.

The first dent in the unfunded pension liabilities occurred in May when Bethlehem offered 10 million shares of common stock at $19 a share. A year earlier, Bethlehem's stock was mired in the single digits, partially due to investor concern about the $20 a ton the unfunded liabilities added to its steel-making costs, said Jeffrey Miller, a steel analyst with Duff & Phelps Inc., Chicago.

The offering, however, was snatched up, and about $170 million of the $184 million in proceeds from the offering was directed to the pension fund, said Gary Millenbruch, Bethlehem senior vice president and chief financial officer.

On June 1, the company contributed an additional $30 million to the fund from cash, followed by another $50 million at the end of the second quarter.

Mr. Millenbruch said if business continues as expected, Bethlehem will make additional payments this year,

*Continued on page 37*

**Bethlehem Steel Corp. has taken an aggressive approach to paring its unfunded pension liabilities, using the proceeds from a $250 million stock issue to fund a recent contribution.**

# Currency hires give teachers new class

By Marlene Givant

SPRINGFIELD, Ill. — The $7.1 billion Teachers' Retirement System of the State of Illinois is breaking investment ground, hiring two specialists to manage the fund's currency exposure separately from its underlying foreign stocks.

Instead of hedging into dollars as a short-term defensive measure, the fund will use currency management as a long-term investment. Other funds are only beginning to explore currency management options as the dollar's direction appears increasingly uncertain.

Officials of the Illinois fund, which will substantially increase its international exposure in the near

*Continued on page 38*

# Lawsuits embroil firm

## Unauthorized trading alleged

By Barry B. Burr

EVANSTON, Ill. — Unilateral trades ordered by an ousted principal of Disciplined Investment Advisors Inc. caused a client to lose $2 million in the market, although the money management firm has never informed the unidentified client, according to allegations in a lawsuit and by representatives of the firm.

The alleged costly trades are revealed in a 16-page suit against Daniel J. Schweihs, the ousted principal. The suit was filed by Eugene M. Lerner and William J. Breen, the two remaining principals of the firm, who also are tenured professors of finance at Northwestern University's Kellogg School of Management.

Mr. Schweihs' ouster, the filing of the suit and Mr. Schweihs' subsequent countersuit mark the bitter breakup of the firm's three-man team. The three, who share ownership equally in Disciplined Investment, made the firm one of the fastest growing of the newly founded money managers of the decade's bull market. Started virtually from scratch in 1984, it now has $600 million under management in equities. The two professors continue to run the firm.

Disciplined Investment's clients, predominantly corporate pension sponsors, include the pension funds of Xerox Corp., Armstrong World Industries Inc., San Diego Gas & Light Co. and the Pension Benefit Guaranty Corp., according to a court filing listing 45 clients.

The clients, although they had been informed Mr. Schweihs had left in late April, never were told of the lawsuit that was filed some weeks later, or of the allegations contained in it, according to pension executives.

None of the pension executives was aware of the alleged unilateral trades. They declined to comment on the allegations in the suit or countersuit.

"I'm a little surprised about it," Robert J. Harmon, director of the Illinois State Board of Investment, Chicago, a client, said of the lawsuit. "One doesn't

*Continued on page 37*

**Disciplined Investment Advisors' three principals (from left) Daniel Schweihs, William Breen and Eugene Lerner came together at the firm whose slogan is "invest without emotion."**

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## LATE NEWS

### 401(k) plan regulations released

WASHINGTON — In its long-awaited regulations on 401(k) plans issued late last week, the Department of the Treasury has decided to retain hardship provisions for active employees to withdraw funds from the plans.

The regulations follow the current practice of allowing an employee to withdraw money to pay for college education, catastrophic medical expenses or the down-payment on a house. Employers had urged easing the hardship standard, arguing stringent rules would deter employee participation.

### Dai-Ichi buys stake in realty firm

CHICAGO — Dai-Ichi Mutual Life, Japan's second largest insurance company, has acquired a 20% limited partner interest in LaSalle Partners Ltd., a Chicago-based real estate services firm, according to industry sources.

LaSalle has sought a partner for the purpose of infusing capital into the firm. Terms of the deal weren't disclosed.

Gretchen F. Needham, vice president-communications for LaSalle, would neither confirm nor deny the transaction. LaSalle *Partners is the parent of LaSalle Advisors Ltd.*, with about $2.22 billion in tax-exempt assets.

### Insider trading proposal gains

WASHINGTON — Investment advisers and broker-dealers would be held liable for overlooking insider-trading or for failing to police that activity under a bill passed by the House Energy and Commerce Subcommittee on Telecommunications and Finance late last week.

The bill, which would toughen penalties for trading on material non-public information, says broker-dealers and investment advisers are as liable as the individual responsible for the illegal trade if they "knew or recklessly disregarded" facts that would give them reason to believe insider trading occurred. They also would be liable for "knowingly and recklessly" failing to establish, maintain or enforce" procedures designed to prevent violations.

### Touche Remnant share acquired

BOSTON — Liberty Mutual Insurance Co. has acquired a 15% interest in Touche Remnant Holdings Ltd., the London-based holding company whose subsidiaries manage more than $6 billion in institutional and individual assets.

The investment will help Boston-based Liberty Mutual and its Chicago-based subsidiary, Stein Roe & Farnham, to offer international investment products managed by Touche Remnant. Stein Roe manages more than $13 billion.

### UAM acquiring 20th manager

BOSTON — United Asset Management Corp. agreed to buy Sirach/Flinn, Elvins Capital Management Inc., a Seattle-based manager with $700 million in assets. Terms weren't disclosed. The purchase would bring to 20 the money management companies UAM owns and increase its total assets to $28.2 billion. The five principals of Sirach/Flinn will have long-term employment contracts with UAM.

### Funds change manager rosters

• MORRISTOWN, N.J. — The $7 billion pension fund of Allied-Signal Inc., Morristown, N.J., has hired MIG Realty Advisors Inc., West Palm Beach, Fla., to make direct, separate account investments in real estate, said Edward T. Tokar Jr., vice president-investments.

No specific amount was allocated and no investments have been made yet. Assets will come from cash.

• COLUMBUS, Ohio — The Ohio Police and Firemen's Disability and Pension Board, overseeing $2.5 billion in defined benefit assets, released The Travelers Cos., Hartford, Conn., as an active equity manager and hired three other firms to run the $300 million portfolio, said Ted Hall, manager-investments.

Taking over equal shares of the Travelers account are Atalanta/Sosnoff Capital Corp., New York; Loomis, Sayles & Co. Inc., Detroit; and Oppenheimer Capital Corp., New York.

## DEPARTMENTS


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Vol. 16, No. 17 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1988

## Consultant survey out

Questionnaires for *Pensions & Investment Age*'s annual directory of investment management consultants have been mailed.

If you have not yet received a questionnaire and wish to be included in the Oct. 17 directory, contact Christine Philip, directory coordinator, *Pensions & Investment Age*, 740 N. Rush St., Chicago, Ill. 60611-2590; (312) 649-5217.

Questionnaires must be returned by Sept. 5. If you have any questions, contact Ms. Philip.

# Eastern waiver bid may hit turbulence

By Nicky Robertshaw

WASHINGTON — Eastern Air Lines Inc.'s latest effort to secure a waiver of its $105 million pension contribution is certain to fly into strong headwinds.

Failure to win government approval of the waiver request — Eastern's second in three years — would drain the company's meager cash resources and cause additional hardship for the airline, which already is beset by large recent losses, heavy debt burdens and labor problems.

Eastern — which had a projected benefit obligation of $1.5 billion while its assets at fair value were $1.2 billion, according to its most recent 10K filing — had announced its intention to apply for a waiver in connection with a restructuring that will eliminate the company's Kansas City operation and lay off 4,000 employees. (Last week a federal judge blocked the Kansas City closing; Eastern is appealing the order.)

An equally formidable challenge for Eastern, however, is last year's amendment to the Employee Retirement Income Security Act that gave the Internal Revenue Service "some basis for turning down waiver requests by companies that in all probability can't pull out" of their financial difficulties, said a pension law attorney who asked not to be identified.

Because the new standards for funding waivers went into effect only recently, this will be one of the first tests.

On July 29, Eastern asked the IRS for a waiver of the company's $105 million contribution due Sept. 15. The amount represents not only the payment owed for the 1987 plan year, but also an installment representing approximately one-third of the amount, plus interest, that was waived for the 1985 plan year.

While observers agree Eastern is undergoing financial problems, many are skeptical that the condition is temporary. In addition, the waiver amount represents about a quarter of the company's current cash position in a business where cash flow is critical, analysts said.

Eastern has about $300 million to $400 million in cash and is looking at a business drop-off after Labor Day, so $105 million is "pretty important to them," said Timothy Pettee, associate director at Bear Stearns & Co., New York. "In the airline business, cash is king."

"I tend to doubt Eastern's ability to grow and prosper," said Mr. Pettee. "Even with significant cost reductions and savings, the company won't have the necessary cost differential" compared with healthier airlines.

In addition to its labor problems and losses for the first two quarters of this year, "Eastern has humongous debts — and they're not going to go away overnight," said Charles P. Manchuso, senior airline analyst, Moody's Investors Service Inc., New York.

As of June 30, the company had $2.5 billion in total debt, he noted, with interest expenses for fiscal 1987 at about $300 million.

Eastern had losses of $31 million on revenue of $1.1 billion for the first quarter, and at press time was expected to announce deeper losses for the second quarter.

As of March 31, it had $2.4 billion in long-term obligations: $1.7 billion in long-term debt and $700 million in capital leases. That compares with total non-redeemable preferred stock and common shareholder equity of $28 million. During the quarter, Eastern paid out $71.4 million in debt service.

*Continued on page 39*

James Balog, left, calls himself the "part-time" chairman of the newly christened 1838 Investment Advisors. W. Thacher Brown is president and chief executive officer of the reborn firm.

# Faster growth mapped out by ex-Drexel unit

By Joel Chernoff

PHILADELPHIA — Free of the tarnish of the government investigation of former parent Drexel Burnham Lambert Inc., 1838 Investment Advisors will move to increase its product line and expand its marketing effort domestically and abroad.

The July 21 sale of Drexel's former money management arm — Drexel Burnham Lambert Investment Advisors — to its managers and an outside investor will help the firm move into a new era. The new firm's name reflects its 150-year-old beginnings as part of the original Drexel & Co. It has $3 billion in assets under management, 56% of which are tax-exempt.

"I think it's very positive in that they changed the name and they're trying to get away from the Drexel stigma," said Annette Calderwood, a research analyst at SEI Funds Evaluation Services Inc., Chicago.

"The Drexel name has hurt" the firm's business prospects in the past year, said Terry Bilkey, senior vice president, Butcher Consulting Group, Pittsburgh.

Officials at 1838 Investment Advisors denied the investigation was the reason for the sale, instead saying they wanted to control their destiny and infuse an entrepreneurial spirit into the firm.

Seventy-five percent of the firm was purchased by management, with a 25% passive equity piece purchased by Lambert Brussels Associates L.P., part of The Pargesa/Groupe Bruxelles Lambert

*Continued on page 39*

# Bailout by NCNB leaving no wake

By Fred Williams

DALLAS — The bailout of First RepublicBank Corp. by NCNB Corp. is not expected to have major repercussions in the trust investment divisions of the two banking giants for several months, and is having little immediate impact on clients.

H. Edward Anderson, chairman of First RepublicBank Asset Management, said he believes the two investment management sections "will be run as two separate organizations. We serve two different markets."

Don Berdine, senior vice president and chief investment officer at NCNB, said, "For the foreseeable future we will have two outstanding trust departments and it will be well into 1989 before we begin talking about what will happen (in the trust investment area). I'm optimistic. They have strengths we don't have and by combining the products of the two entities, hopefully they will become a stronger money manager and trust department as we will."

Most institutional trust clients of the former First RepublicBank, now NCNB Texas National Bank, said it is too early to decide what will happen, but

*Continued on page 39*

# Credit quality better

## Rating scenario upbeat for second half

By Brad Rudin

Reversing a long-term decline, credit quality improved in the second quarter on the strength of improving fundamentals in the energy sector and a favorable international competitive position for industrial credits generally.

"Underlying this favorable rating trend is a demonstrably strong domestic economy which has provided a healthy operating environment for most firms," Duff & Phelps Inc., Chicago, reported in its assessment of second quarter credit quality.

Looking ahead, Duff & Phelps noted its Watch List of credits under review "bode(s) well for the remainder of 1988."

Both Moody's Investors Service and Standard & Poor's Corp. presented a cautiously upbeat view of the future of credit quality.

Downgrades as a percentage of total rating actions fell at each of the five credit rating agencies.

At Duff & Phelps, downgrades as a percentage of total rating actions stood at 29% in the second quarter compared with 55% in the first quarter. At Standard & Poor's, downgrades accounted for 55% of rating actions in the second quarter, compared with 69% in the first; at Moody's, 63% vs. 69%; at McCarthy, Crisanti & Maffei Inc., 60% compared with 88%; and at Fitch Investors Service, 54% against 64%.

S&P reported the main impetus for the positive shift in credit quality came from the energy group, where 18 ratings were upgraded and only one was downgraded. The firm cited the upgrades of Texaco Inc., which was discharged from Chapter 11 bankruptcy proceedings, and Mobil Corp., which has strengthened its balance sheet and achieved better pricing.

For industrial credits generally, S&P said the healthy economy resulted in affirmed ratings for credits vulnerable to downgrade, but the agency's report added, "this does not necessarily portend a flurry of higher ratings in the third and fourth quarter." Corporate restructurings are likely to limit improvements in industrial credit quality, according to the report.

While the upgrades equaled downgrades in the industrial companies rated by Standard & Poor's, downgrades exceeded upgrades in the financial institutions, utilities and transportation sectors.

Of the 23 companies upgraded by Moody's, 15 were in basic industries and related sectors. Successful restructuring, cost cutting and a weakened dollar are responsible for the uptick, Moody's said.

But Moody's also cautioned expected corporate restructurings in retailing, electronics and construction likely would weaken credit quality in those industries.

Houlihan Lokey Howard & Zukin Inc., Los Angeles, which ranks corporate credits according to stock market-based data, noted second-quarter credit quality improvements among oil and steel companies.

Recapitalized companies such as Harcourt Brace Jovanovich Inc. and Viacom International Inc. are rapidly improving credits because the healthy economy eases concerns about leverage, Houlihan Lokey reported.

Houlihan Lokey also noted credit quality deteriorated in the health-care sector, where declines were especially evident in hospital administration and medical products. ■

**Corporate credit rating changes**

| | 2nd quarter 1988 | | 1st quarter 1988 | |
|---|---|---|---|---|
| | Up | Down | Up | Down |
| Duff & Phelps | 22 | 9 | 20 | 24 |
| Fitch Investors Service | 13 | 15 | 5 | 9 |
| McCarthy, Crisanti & Maffei | 8 | 12 | 2 | 14 |
| Moody's Investors Service | 38 | 65 | 34 | 75 |
| Standard & Poor's | 73 | 89 | 57 | 127 |

Source: The rating agencies

# Legal fight now rests with judge

CHICAGO — Attorneys for Navistar International Corp., the Pension Benefit Guaranty Corp. and a Wisconsin Steel Co. bankruptcy debtors group have presented their closing arguments in U.S. District Court in the Wisconsin Steel unfunded pension liabilities case.

The judge's decision could determine the extent of the PBGC's reach in seeking assets from a corporation involving a former subsidiary that subsequently was unable to pay pension benefits.

Judge James B. Moran has taken the case under advisement and is expected to render a decision near the end of this month.

Judge Moran could award treble damages, totaling $900 million, to the plaintiffs if he convicts Navistar in the bench trial for fraud, racketeering and bankruptcy violations. Navistar faces $300 million in claims, including $146 million in unfunded pension liabilities and interest.

Attorneys for the PBGC and a creditors bankruptcy group contend Navistar, then called International Harvester Co., fraudulently sold the Wisconsin Steel unit in 1977 to dump the unit's unfunded pension liabilities, then totaling about $70 million, onto the PBGC.

They argue Navistar knew the buyer, Envirodyne Inc., would be unable to make Wisconsin Steel a viable economic entity. The steel unit filed for bankruptcy in 1980 and subsequently was closed.

Navistar attorneys argue Envirodyne's business proposals for the steel company were sound and that the PBGC reviewed the pension plans before and after the sale, indicating no imminent worries about continued funding.

Envirodyne isn't involved with the suit, having paid the PBGC a $2 million settlement. ■


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MUTUAL FUNDS

# Institutions keep industry growing

By Carol Wiley

Retail investors, wary of the real or perceived risk of the market, have shunned equity mutual funds since Oct. 19, while institutional investors, accustomed to the ups and downs of the long haul, account for the increased use of mutual funds.

Rather than pull out of the market entirely, investors are moving assets into bond and short-term funds, or, at the very least, into conservative, blue-chip stock funds to minimize risk.

The mutual fund industry, meanwhile, attempting to reassure the customers it already has, is concentrating on more and better service and products, including customized investment plans that provide small clients with all of the sophisticated bells and whistles the big guys use.

Statistics from the Investment Company Institute, the national association of the mutual fund industry, confirm what several industry experts have reported.

Sales of stock, bond and income mutual funds were down $2 billion in May from April, and down $6.1 billion from May of 1987. Sales totaled $7.1 billion in May, compared with total sales in April of $9 billion, $9.1 billion in March, and $13.5 billion one year ago.

"Activity levels in general have been subdued as investors are apparently continuing to assess their investing strategies," said Ann Anderson, ICI assistant vice president of research.

Total assets of all mutual funds decreased $7 billion in May from April, and $1.5 billion since May of 1987. Total assets decreased in May to $803.8 billion, from $810.8 billion in April and $805.3 billion in May 1987.

"The decline in assets of long-term funds reflects lower bond prices in May, as well as shifts of assets from long-term funds to money market funds and other investments," Ms. Anderson said.

Government bond funds earned the sales lead in May with $1.4 billion in total sales, including reinvested dividends, followed by long-term municipal bond funds at $900 million.

Total May redemptions, which include transfers between funds, were down $100 million from April's $8.1 billion, and down $1.7 billion from $9.7 billion one year ago. Net sales of stock, bond and income funds in May were a negative $900 million, compared with $900 million in April and $3.9 billion in May, 1987.

Banks and insurance companies, which are prohibited from owning a mutual fund company or underwriting the funds but are free to manage funds, also are getting into the act because "it's the viable way for the average individual to invest," according to

*Continued on page 25*

## Largest mutual fund companies

| Company | Assets ($ billions) | Number of funds |
|---|---|---|
| Fidelity Mgmt. & Research | 71.7 | 131 |
| Merrill Lynch Asset Mgmt. | 71.2 | 57 |
| Shearson Lehman Hutton | 53.2 | 112 |
| Federated | 41.4 | 57 |
| Dreyfus | 35.8 | 76 |
| Dean Witter Reynolds | 34.7 | 28 |
| Franklin Resources | 33.7 | 59 |
| Kemper Financial Services | 32.2 | 30 |
| Vanguard Group | 32.1 | 51 |
| Putnam | 29.8 | 47 |
| Prudential Mutual Fund Mgmt. | 22.3 | 56 |
| Capital Research and Mgmt. | 18.7 | 33 |
| IDS Financial Services | 18.2 | 34 |
| Massachusetts Financial Services | 15 | 45 |
| T. Rowe Price Associates | 14.4 | 26 |

All figures as of May 31

Source: Hampton Investors Inc., New York, and Investment Company Institute

# Bond funds reap gains from fall of stock market

By Trudy Ring

Dollars flowing into fixed-income funds have been the major cause of asset growth at the mutual fund companies that have prospered since the Oct. 19 stock market crash.

Most of the companies had few clients pull money out after the crash, but had transfers to fixed-income funds from equity funds.

The companies also report some growth in conservative equity funds — but fixed income is by far the biggest draw.

Prudential Mutual Fund Management Inc., New York, has had stellar asset growth in the post-crash environment. As of July 22, its mutual funds had assets of $27.45 billion, up from $23.25 billion Oct. 1 and $23.35 billion at year end.

Although Prudential — like most companies surveyed — couldn't provide an exact breakout of how much growth was due to market appreciation vs. new commitments, Michael Downey, president of the mutual fund group, said new commitments were the major reason for the growth.

The biggest draws for new commitments have been fixed-income funds that concentrate on U.S. Treasury and government agency securities, he said.

Massachusetts Financial Services Co., Boston, reported its mutual fund assets grew to $18.1 billion by June 30, from $14.6 billion at year end and $14.4 billion Oct. 1.

"In the months immediately following Oct. 19, the enhanced government funds far and away were the most popular funds, and continue to be the biggest seller by a wide margin," said William W. Scott Jr., senior vice president. These funds concentrate on Treasury and agency securities.

However, their popularity is being challenged by funds investing in municipal, high-yield or intermediate-term bonds, and total return (balanced) funds also have come on strong, he said.

Kemper Financial Services Inc., Chicago, has been another big winner, with $33.3 billion in mutual funds as of June 30, up from $30.5 billion at year end and $31.5 billion at the close of the third quarter.

The high-yield bond area has been the most popular for Kemper, said T.V. Williams, executive vice president and managing director-mutual funds. The decline in the fourth quarter was due largely to the decline in the market value of equities, he said.

"We had an awful lot of switching" to fixed-income funds from equities after the crash, Mr. Williams said. "In terms of pure redemptions, it was much less than we would have imagined or you would think."

Some other big mutual fund companies have had more

*Continued on page 24*

# Covering the globe

## Assets going overseas triple in 4 years

By Marlene Givant

At $31 billion, global and international funds comprise the fastest growing sector in the mutual fund industry with bond funds fueling the recent momentum.

Mutual funds, like pension funds, have tripled their global and international assets since 1984, according to figures supplied by the Investment Company Institute, Washington, and global and international bonds, the new darling of pension fund investments, are leading the mutual fund scene as well.

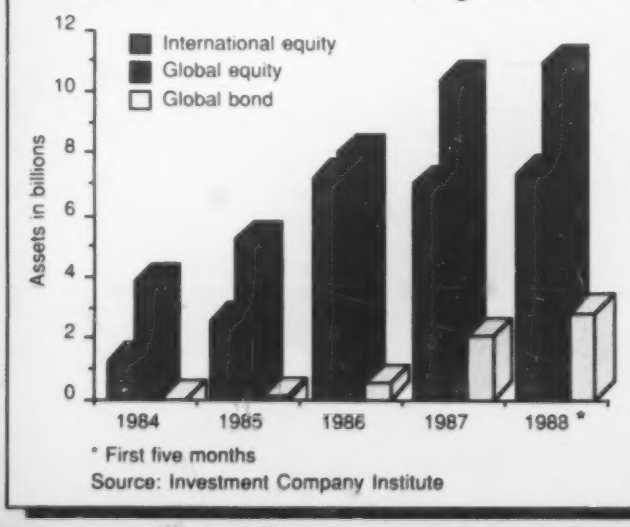
Global and international bond mutual funds totaled $2.8 billion as of May 31, less than one-third the amount of foreign bonds managed for U.S. tax-exempt funds (*Pensions & Investment Age*, June 27), but the assets are growing furiously, fueled by booming sales. Assets in international and global bond funds totaled $2.8 billion as of May 31 vs. $64.4 million in 1985, according to the ICI.

"Foreign bond funds have attracted people interested in the international story but concerned about stock market valuations here and overseas," said George Murnaghan, vice president of Rowe Price-Fleming International Inc., Baltimore, which manages the 2-year-old T. Rowe Price International Bond Fund, whose $420 million in assets rivals the 8-year-old T. Rowe Price International Equity Fund's $654 million.

Given the parallels with pension funds, it's no surprise international and global mutual funds attract substantial interest from institutions. In the past two years, institutions have held slightly more than one-third of the assets in international and global equity mutual funds. They're lured by management expertise at prices

*Continued on page 27*

### Non-U.S. mutual funds asset growth




* First five months

Source: Investment Company Institute

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# Institutions

*Continued from page 23*

Dick Loos, managing director of Marinvest, New York, with $1.2 billion in mutual funds under management.

"The industry is very much alive and very well, even though there have been downtrends in sales, because it's the ideal way to invest," Mr. Loos said. "Even though the industry is oversupplied, there is a tremendous retail market still available.

"When they become more comfortable with the market, they will go back in."

Results from an ICI survey a month after the crash revealed 75% of the respondents ranked safety and stability as the most important reason for their investment choices, according to Charles Mizrahi, president of Hampton Advisors Inc., New York, which manages $21 million in mutual funds.

"It used to be about 75% of the customers were willing to lose 15% to 20%, but now only about a quarter of them are," he said.

Until the comfort level returns, retail investors, instead of making redemptions, are "transferring within the family, retailoring their investments," Mr. Mizrahi said.

And mutual fund companies are making sure they retain the clients they have.

Money market funds are advertising, normally, they don't have to. "Most regard a short-term fund as a temporary parking place" while waiting for interest rates and the market to move, said Stan Egener, president of Neuberger & Berman Management Inc., New York. The firm has $1 billion in mutual fund assets.

Since Oct. 19, the average load or service charge for about 20 mutual funds has dropped to 5% from 8.5%; some funds have done away with loads all together.

Mutual fund companies have installed more telephone lines for customers, and, with a few taps on their Touch-Tone phones, can obtain information about their accounts and transfer money from one fund to another.

"We're seeing tremendous interest in providing cost-efficient, quality service to the customer, because we don't want to lose the customer," said Donald Hearn, executive vice president of The Boston Co. Advisors, which has $1.2 billion in mutual fund assets.

Mr. Hearn, who also noted a shifting of assets into fixed-income accounts from equities, said mutual fund managers, particularly banks, also are creating new products to attract and retain customers. The Boston Co., for example, has an asset allocation system, so the customer can designate an asset mix for his or her investment.

Alliance Capital Management Corp., New York, also has a customized product, pegged to the Standard & Poor's 500 stock index, according to Jack Horney, vice president. Alliance has $10 billion in mutual fund assets.

Meanwhile, while the retail market was taking a beating, the institutional side of the industry is growing, reaping the assets from defined contribution plans and specifically 401(k) plans.

Twenty-five percent of all pension funds use mutual funds, according to Denman Zirkle, managing director of Marinvest, and mutual funds' "inherent advantages will continue to appeal to institutional users."

"The institutional market is long term, and there is no evidence the institutional mutual fund market is declining," said Mr. Zirkle.

Marine Midland Bank, the New York-based parent of Marinvest, has added an intermediate bond fund and an equity fund and is looking at investment products from Hong Kong and Shanghai to round out its offering of mutual funds.

"There is more interest than ever" in mutual funds as 401(k) options, said Laura Henry, assistant vice president-institutional marketing for Fidelity Investments Institutional Services Co., Boston. Fidelity has $75 billion in mutual fund assets.

More flexible funds will continue to be developed in response to proposed Department of Labor regulations that reduce the employer's fiduciary responsibility if the employer offers a broad range of investment options, Ms. Henry said. ■

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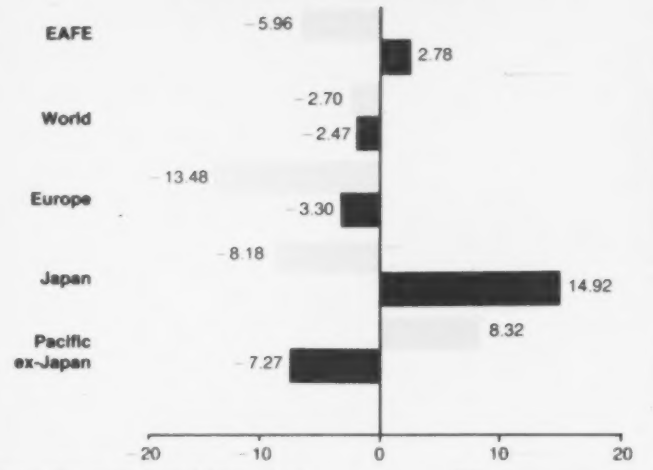
July 25, 1988

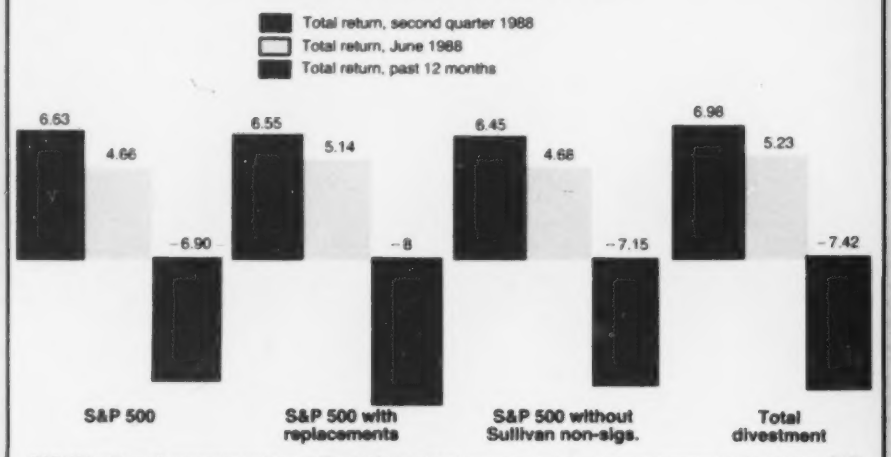
# STATISTICALLY SPEAKING

## Morgan Stanley Capital International worldwide indexes




Source: Morgan Stanley Capital International
Indexes are in U.S. dollar terms without dividends reinvested

## South Africa Free Index




**S&P 500 with replacements:** replaces a South Africa-related company with next largest company in the industry. **S&P 500 without Sullivan non-signatories:** excludes 20 companies, no replacements. **Total divestment:** eliminates all companies with South Africa involvement, no replacements.

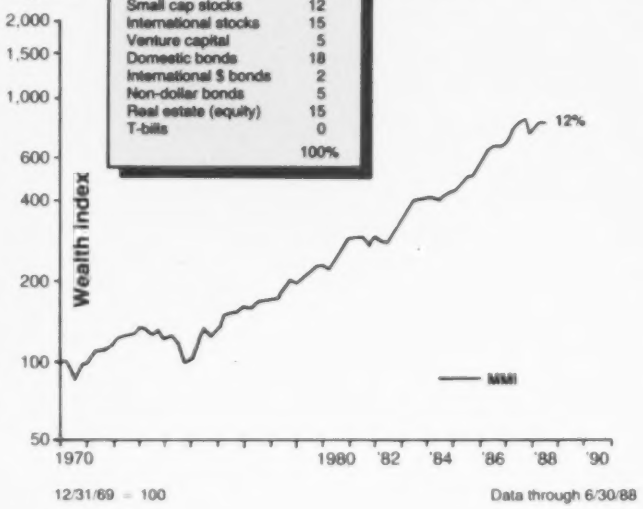
Source: Wilshire Associates, Santa Monica, California

## Multiple Markets Index

The Multiple Markets Index is a benchmark for total portfolio returns. It is composed of eight asset classes used by retirement plan executives; it is calibrated to reflect the same degree of risk of the typical pension portfolio; it uses passive fixed policy weights; and it represents the individual asset classes by the broadest and most complete market return data available.

| Weights | |
|---|---|
| Large cap stocks | 28% |
| Small cap stocks | 12 |
| International stocks | 15 |
| Venture capital | 5 |
| Domestic bonds | 18 |
| International $ bonds | 2 |
| Non-dollar bonds | 5 |
| Real estate (equity) | 15 |
| T-bills | 0 |
| | 100% |

| | |
|---|---|
| Five-year annualized return | 14.7% |
| One-year return | 3.5% |
| Latest quarter | 2.3% |

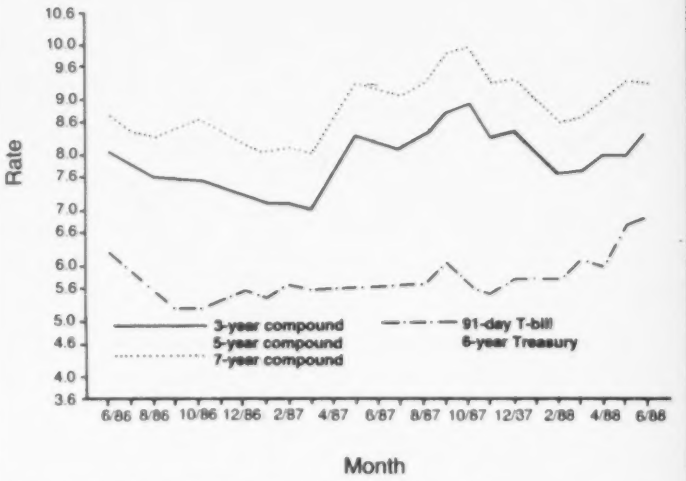



12/31/69 = 100 Data through 6/30/88

Source: First Chicago Investment Advisors, Chicago

## Summary of average bullet GIC data vs. market yields

**($1 million contract)**




Source: William M. Mercer-Meidinger-Hansen Asset Planning Inc., Dallas

## Second quarter 1988 returns

| | Russell 3000® | Russell 1000® | Russell 1000® by market capitalization | | | | Russell 2000® |
|---|---|---|---|---|---|---|---|
| | | | Large | Medium/large | Medium | Medium/small | |
| Technology | 10.95% | 11.52% | 12.54% | 11.88% | 9.26% | 7.27% | 6.27% |
| Health care | 0.51 | 0.17 | 0.72 | -3.19 | 2.52 | 5.94 | 3.57 |
| Consumer discretionary | 5.84 | 5.50 | 6.73 | 3.43 | 6.27 | 7.03 | 8.04 |
| Consumer staples | 1.62 | 1.32 | 0.84 | -0.59 | 5.74 | 6.92 | 10.86 |
| Integrated oils | 2.33 | 2.32 | 3.41 | -8.75 | 6.50 | 1.87 | 5.82 |
| Other energy | 1.78 | 2.32 | NA | 3.12 | 1.42 | 3.19 | -1.98 |
| Materials and processing | 10.16 | 10.43 | 13.51 | 11.41 | 9.81 | 7.43 | 8.16 |
| Producer durables | 6.33 | 5.95 | 4.62 | 5.68 | 3.54 | 14.87 | 9.30 |
| Auto and transportation | 9.64 | 9.53 | 19.74 | 1.99 | 4.94 | 6.66 | 11.16 |
| Financial services | 8.80 | 9.22 | 11.28 | 10.83 | 10.25 | 5.23 | 2.93 |
| Utilities | 7.08 | 7.09 | 7.27 | 6.22 | 7.71 | 7.76 | 6.49 |
| Total | 6.85 | 6.83 | 7.23 | 5.28 | 7.04 | 6.99 | 6.97 |

Source: Frank Russell Co., Tacoma, Wash.

STATISTICALLY SPEAKING

# GIC rates rise slightly

## Fears of inflation, moves by Fed explain increase

By Curtis Vosti

Rates on guaranteed investment contracts offered by insurance companies increased slightly in the second quarter, while spreads between the GICs and comparable Treasuries continued to be tight.

Observers agree the higher rates primarily are due to concerns of inflation and two second-quarter cinches of interest rates by the Federal Reserve Board.

Although "the old heydays of 100 to 150 basis points over Treasuries is over," the demand for GICs is still heavy, according to Sharon Morell, a GIC contract negotiator for Morley Capital Management, Lake Oswego, Ore.

"There is a steady stream of buyers, even though the spreads were not as high as they had been at the end of last year," said John Knight, president of Lamberson Knight Investment Securities, a Short Hills, N.J., GIC brokerage firm.

"They (investors) finally realized that this is where the spread is going to be," Mr. Knight said.

Insurers are looking to expand product lines in light of the continual tight supply of GICs because of the increasing demand, as well as the stepped up marketing by banks and savings and loans of their versions of guaranteed contracts, according to Peter Bowles, president of Fiduciary Capital Management Inc., Boston, an GIC investment manager.

Bankers Trust Co., New York, reports $300 million in new clients this year for its bank investment contract product.

The demand for guaranteed investment products is so great some insurers had to stop accepting business because they were approaching or had reached their capacity limits, Ms. Morell said.

"We saw several insurance companies step back (during the second quarter) and saw they had done well over 50% of their GIC business (capacities)," she said.

Because this is the time of year when many plans seek bids on GICs for 1989, Mr. Bowles said there will be an increasing strain on insurance companies, which by law are restricted in their GIC capacities through specific reserve requirements.

However, this seasonal strain is being offset partially by the "BICS" and "SLICS" offered by banks and savings and loans, and through the practice of some major plan sponsors of bidding out their GICs several times a year instead of just once a year, Mr. Bowles said. "That spreads the strain on the insurers over a much longer period of time," he said.

Gene Gochenour, president of GIC Inc., Beaverton, Ore., a GIC broker, said an additional benefit of increasing the number of times a year plan sponsors go out for GICs is that it allows them a chance at a better rate and allows employees to participate in up and down markets as they choose.

He said that as the GIC industry matures, plan sponsors are looking at variations of the traditional window or bullet plans. "We have seen quite a few requests for 'ladder' GICs to allow for diversification of insurance companies and maturities," he said.

Scott Sokol, director of investments for Chambers, Dunhill, Rubin & Co., a Beverly Hills, Calif., investment banking firm, said the open-ended floating rate GICs, where rates change monthly, have been one vehicle for new insurers to enter the GIC market and thus expand capacities.

"The insurance companies are definitely not having any problems filling capacities," he said.

GIC Inc. and Lamberson Knight provide insurance company rate quotations on representative five-year, single deposit, simple interest, $1 million GICs for June 30 and March 31, as follows:

- Allstate Life Insurance Cos., Northbrook, Ill.: June 30, 8.61%; March 31, 8.41%.
- American United Life Insurance Co., Indianapolis: 8.77%; 8.36%.
- Banker's Life Assurance Co., Des Moines, Iowa: 8.44%; 8.12%.
- CNA Insurance Co., Chicago: 8.7%; no quote.
- Confederation Life Insurance Co., Atlanta: 9.13%; 8.85%.
- Connecticut Mutual Life Insurance Co., Hartford, Conn.: 8.71%; 8.37%.
- Crown Life Insurance Co., Toronto: 8.79%; 8.25%.
- Great West Life Assurance Co., Denver: 8.85%; 8.06%.
- Hartford Life Insurance Co., Hartford, Conn.: 8.81%; no quote.
- Home Life Insurance Co., New York: 8.7%; 8.21%.
- John Hancock Mutual Life Insurance Co., Boston: 8.62%; 8.41%.
- Life Insurance Co. of Georgia, Atlanta: 8.91% (June 28); no quote.
- Life Insurance Co. of Virginia, Richmond: 8.74%; 8.7%.
- Lincoln National Pension Insurance Co., Fort Wayne, Ind.: [illegible]% (June 28); no quote.
- Massachusetts Mutual Life Insurance Co., Springfield, Mass.: 8.45%; 8.13%.
- Minnesota Mutual Life Insurance Co., St. Paul: no quote; 8.63%.
- Mutual Benefit Life Insurance Co., Newark, N.J.: 8.7%; 8.3%.
- Mutual of New York, New York: 8.77%; 8.35%.
- New England Mutual Life Insurance Co., Boston: 8.67%; 8.02%.
- New York Life Insurance Co., New York: 8.9%; 8.35%.
- Northwestern Mutual Life Insurance Co., Minneapolis: 8.6%; 8.37%.
- Ohio National Life Insurance Co., Cincinnati: 9%; 8.75%.
- Pacific Mutual Life Insurance Co., Newport Beach, Calif.: 8.33%; 7.92%.
- Pan American Life Insurance Co., New Orleans: 9.04%; 8.69%.
- Penn Mutual Life Insurance Co., Philadelphia: 8.9%; 8.82%.
- Phoenix Mutual Life Insurance Co., Hartford, Conn.: 8.8%; 8.5%.
- Provident Mutual Life Insurance Co., Philadelphia: 8.51%; 8.46%.

*Continued on page 34*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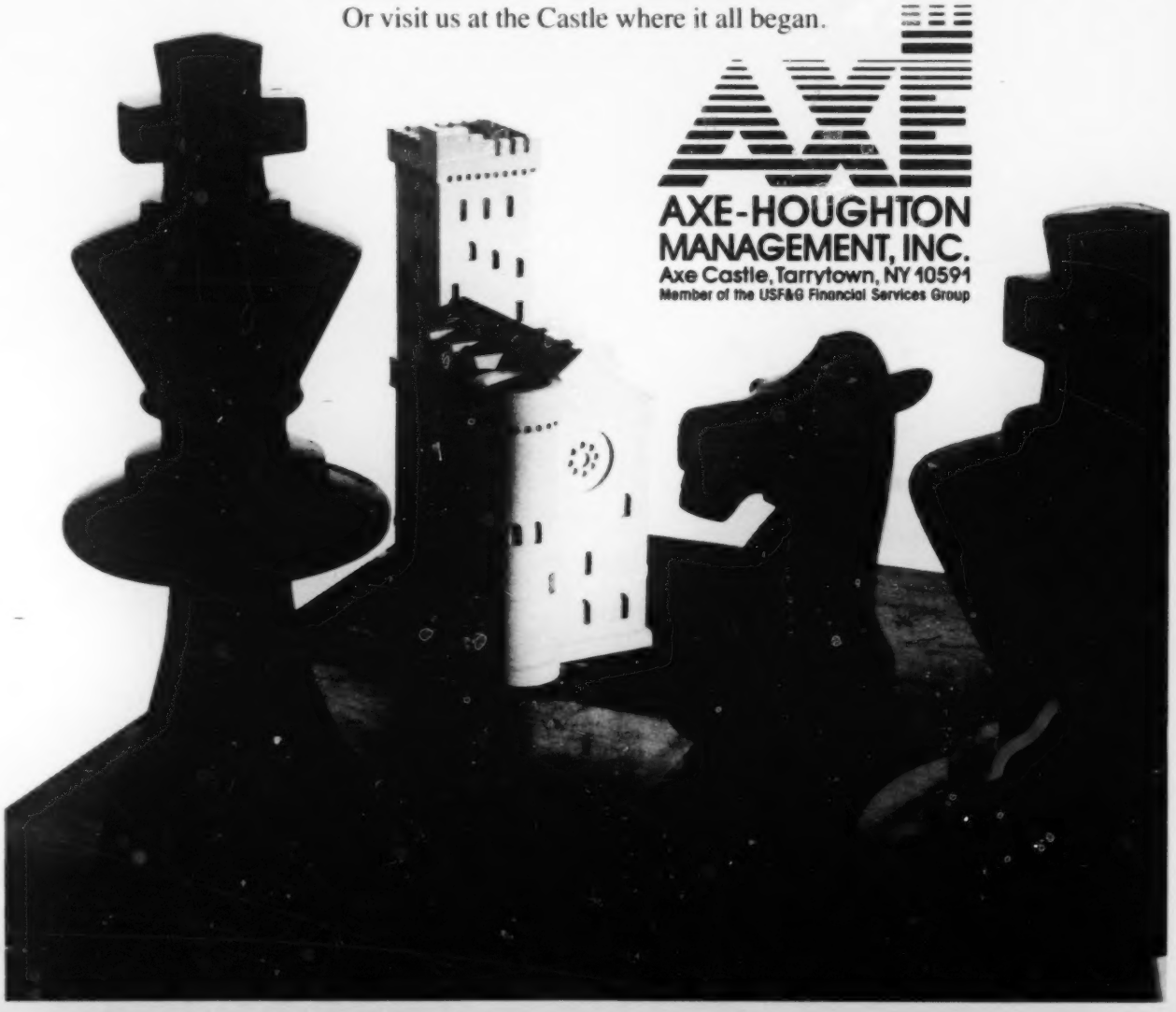

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STATISTICALLY SPEAKING

# Basic industry is leader in quarter

By Trudy Ring

KANSAS CITY, Mo. — Basic industry stocks led the market in the second quarter, while the best-performing bonds were U.S. government issues, according to the consulting firm DeMarche Associates.

The basic industry sector gained 8.8% in price in the quarter, compared with 5.5% for the Standard & Poor's 500 stock index. All stock return figures are price appreciation only.

"Investors are showing faith that the economy will be strong," Robert F. Marchesi, president of DeMarche, said of the sector's and market's performance.

Basic industry stocks gained 13.5% in the first half of the year and lost 6% in the 12 months ended June 30. The S&P 500 gained 10.5% for the half and lost 10.5% for the year.

Stocks sensitive to interest rates were the quarter's second best performers, up 7.8%. They gained 10.5% for the first half and lost 6.4% in the 12-month period.

Technology stocks were up 6.8% in the quarter. They had the worst performance for both the longer periods, with a gain of 5.5% in the half and a loss of 15.1% for the year.

Stocks related to consumer spending gained 2.6% in the quarter. For the half, they gained 10.8%; for the year, they lost 12.8%.

After leading the market in the first quarter, the energy sector was the only negative performer in the second, off 1.1%. The sector was up 12.2% for the half and down 13.3% for the year.

The 10 best-performing industries for the quarter were banks, up 18.7%; cars and trucks, up 16.6%; aluminum and copper, up 15.9%; paper, up 15.2%; office equipment, up 15.1%; miscellaneous metals and minerals, up 14%; textile products and apparel, up 13.3%; miscellaneous financial companies, up 12.2%; building materials, up 10.9%; chemicals, up 9.4%.

The bottom 10 industries were integrated domestic oil, down 7%; oil service and equipment, down 6.3%; tobacco, down 4.1%; truck transportation, down 1.6%; drugs, down 0.6%; food packagers and processors, also down 0.6%; special machinery, down 0.5%; integrated international oil, up 0.7%; rail transportation, up 1.4%; and consumer household products, up 2.8%.

Besides analyzing stocks by economic groups, DeMarche groups them by quality, growth and yield.

As measured by quality, stocks in the below-average quality quartile, based on several balance sheet variables, outperformed others for all periods. They were up 6.8% in the quarter and 16.7% in the half and down 5.4% for the year.

As ranked by company growth patterns, variable-growth stocks led for the quarter and half, with 6.7% and 13.4% respectively. As rated by yield, low-yield stocks had the best price appreciation for the quarter, 6.9%.

U.S. government issues led the bond market for the quarter with a total return of 1.6%. The market, as measured by the DeMarche Pension Fund Bond Index of 6,000 issues, returned 1.5%. All bond figures are total return.

Government bonds returned 5.7% for the six-month period, while the index returned 5.5%, and 8.5% for the year ended June 30, when the index returned 8.6%.

Financial company bonds were second for the quarter with a 1.5% return. They were up 5.3% for the half and 8.4% for the year.

Industrial, utility and Canadian bonds all returned 1.4% in the quarter. Industrials were up 5.5% in the half and 8.8% for the year; utility issues gained 5.8% for the half and 9.2% for the year; and Canadian bonds were up 5.9% for the half and 8.5% for the year. ■


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# Rates

*Continued from page 33*

- Provident National Assurance Co., Chattanooga, Tenn.: 8.54%; no quote.
- SAFECO Corp., Seattle: 8.9%; no quote.
- Southwestern Life Insurance Co., Dallas: 9.04%; 8.66%.
- State Mutual of America, Worchester, Mass.: 8.65%; 8.35%.
- Transamerica Life Insurance and Annuity Co., Los Angeles: 8.89%; no quote.
- Union Central Life Insurance Co., Cincinnati: 8.38%; 8.63%.

William M. Mercer-Meidinger-Hansen Asset Planning, Dallas, surveys insurance companies for rate quotations, but does not identify the companies. A summary of various bullet GICs for June follows:

- Three-year, $1 million, compound: high, 9.32%; low, 7.77%; average, 8.39%.
- Three-year, $1 million, simple: high, 9.12%; low, 7.66%; average, 8.36%.
- Five-year, $1 million, compound: high, 9.95%; low, 8.15%; average, 8.98%.
- Five-year, $1 million, simple: high, 9.47%; low, 8.11%; average, 8.92%.
- Seven-year, $1 million, compound: high, 9.99%; low, 8.24%; average, 9.27%.
- Seven-year, $1 million, simple: high, 9.75%; low, 8.29%; average, 9.17%.
- Three-year, $5 million, compound: high, 9.27%; low, 7.85%; average, 8.44%.
- Three-year, $5 million, simple: high, 9.03%; low, 7.84%; average, 8.39%.
- Five-year, $5 million, compound: high, 9.97%; low, 8.21%; average, 9.02%.
- Five-year, $5 million, simple: high, 9.48%; low, 8.2%; average, 8.94%.
- Seven-year, $5 million, compound: high, 9.93%; low, 8.41%; average, 9.32%.
- Seven-year, $5 million, simple: high, 9.75%; low, 8.42%; average, 9.18%.

Dietrich & Associates, a Blue Bell, Pa.-based GIC brokerage firm, provided the following rate spread data between a $1 million, five-year, simple-interest GIC and the average Treasury security of the same maturity for 1988's second quarter:

- April 4: GIC, 8.85%; Treasury, 8.15%.
- May 2: 9.05%; 8.34%.
- June 3: 9.2%; 8.51%.

The same information for the previous three quarters was:

- March 1: GIC, 8.65%; Treasury, 8.59%.
- Dec 9: 9.28%; 8.59%.
- Sept. 2, 9.5%; 8.59%. ■

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PENSIONS & Investment Age

August 22, 1988

The newspaper of corporate and institutional investing

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8/25/88

NEW MANAGERS - Ibbotson Capital Mgmt.

# Scholar uses timing model

By Barry B. Burr

CHICAGO — Ibbotson Associates Inc., a consulting firm headed by Roger G. Ibbotson, is forming an investment management subsidiary to offer tactical asset allocation, according to key executives.

Mr. Ibbotson will be chief investment officer of Ibbotson Capital Management Corp., Chicago. In the mid-1970s Mr. Ibbotson, with Rex A. Sinquefield, developed the historical rates of return series in stocks, small stocks, bonds, Treasury bills and inflation widely used in performance comparison, asset allocation and forecasting.

Mr. Ibbotson is president of Chicago-based Ibbotson Associates and finance professor at Yale University's School of Management in New Haven, Conn.

Marvin B. Waring, Ibbotson Associates managing director, said the firm plans to apply in the next couple of weeks to the Securities and Exchange Commission to register as an investment adviser.

Mr. Waring, who will also be managing director at Ibbotson Capital, said he expects the new firm will have its first clients, mostly likely Fortune 500 pension sponsors, soon after the SEC authorization.

"We're confident we can get the money," Mr. Ibbotson said. "We're not anxious to take it too quickly" without a reasonable expectation of success.

At the outset, he said the firm will advise clients on the allocation strategy and sell the signals of when and how much to move between capital market asset classes. The clients will implement the strategy themselves.

Mr. Waring said he expects Ibbotson Capital ultimately to implement the strategy directly and manage assets for clients on a discretionary

*Continued on page 61*

NEW MANAGERS - Goldman Sachs Asset Mgmt.

# Fixed income shop planned

By Barry B. Burr

NEW YORK — Goldman, Sachs & Co. will begin offering separate account investment management this fall under a newly formed asset advisory unit that will be led by a top fixed-income strategist, executives involved in the new operation disclosed.

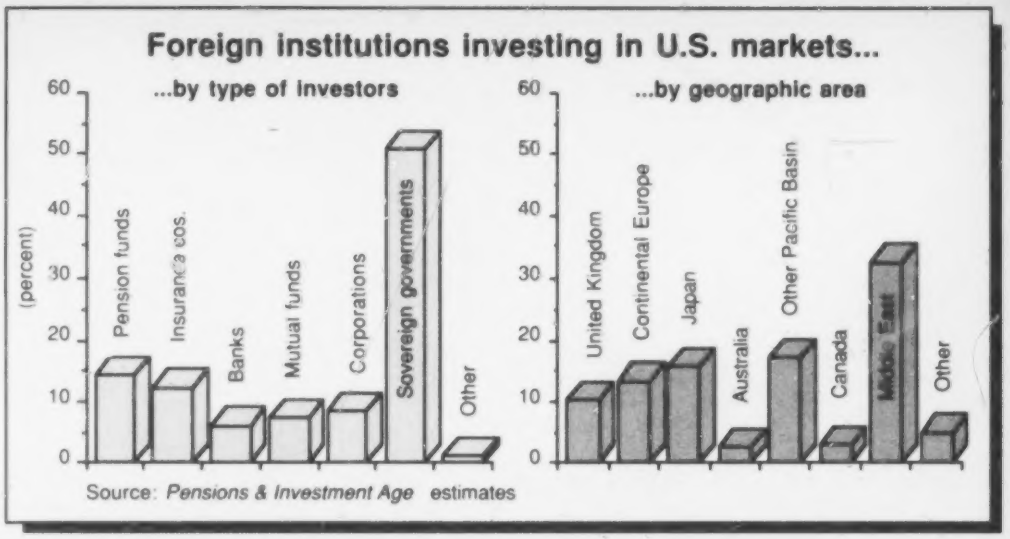
Goldman Sachs Asset Management will specialize in fixed income, marketing separate accounts to corporate and public pension sponsors and other tax-exempt funds, said Alan Shuch, partner in charge. Goldman already runs $13 billion in mutual funds for institutional investors only.

Jess B. Yawitz, a leading strategist who helped bring structured fixed-income strategies such as immunization from academic research to widespread institutional use in the past decade, will be the chief investment officer. Mr. Yawitz, who confirmed his appointment, is a vice president and financial strategist at Goldman's St. Louis office.

Mr. Shuch provided the abbreviated details about the new separate account venture. He said Goldman wanted to withhold further information until details on setting up the unit are completed, probably within the next several weeks.

Mr. Shuch declined to elaborate on the investment stra-

*Continued on page 62*




# Foreigners place $55B with firms

By Joel Chernoff

U.S.-based money managers invested $54.6 billion in U.S. markets for foreign institutional clients as of March 31, according to a survey by *Pensions & Investment Age*.

Fully half — 50.9% — of those assets, or $26.6 billion, came from foreign sovereign governments. Of that total, nearly two-thirds, or $17 billion, is believed to come from Middle Eastern governments, according to survey data and *P&I Age* estimates.

While the growth in assets was held down by last year's global stock market crash, all signs are that foreign-based business will continue to grow.

Major institutions, particularly New York money center banks, have been building this business even before the 1973-74 oil embargo started piping barrels of money into the coffers of Middle East governments, which in turn sought to invest the overflow of assets.

As markets have become global, institutions are becoming more international in their investment policies, and as contributions to U.S. private pension plans have dried up, more entrants are trying to gain a foothold in the potentially lucrative area.

"Large financial institutions have obviously been in an advantageous position, simply because they've been on the spot," said C. Nicholas Potter, president of J.P. Morgan Investment Management Inc., New York. Attracting overseas business "will get increasingly competitive" just as domestic markets have, he added.

**INSIDE: U.S. managers eagerly engage foreign clients — Page 49**

J.P. Morgan, whose foreign business has doubled during the past five to seven years, led the rankings, with $11.5 billion in foreign-based assets invested in U.S. markets, accounting for 21% of the total reported.

Following were: Citicorp Investment Management Inc., with $7.8 billion; Chase Investors Management Corp., $4.9 billion; Morgan Stanley Asset Management, $3.7 billion; Richard Ellis Inc., $2.7 billion; Bankers Trust Co., $2.6 billion; Fisher, Francis, Trees & Watts, $2.2 billion; Chemical Investment Group, $2.2 billion; and Alliance Capital Management Corp., $2 billion. All of the firms are based in New York.

The survey, believed to the first of its kind, also revealed:

- Assets run for foreign institutional clients in U.S. markets grew 13.4% during the 12-month period ended March 31. The unavailability of March 1987 data for a few firms, however, artificially buoyed that figure; *P&I Age* estimates the true growth rate was closer to 10%.

During that period, the Standard & Poor's 500 index dropped 8.4% while the Shearson Lehman Hutton Government/Corporate bond index gained 4.4%. Also, during that time currencies represented in the Morgan Stanley Capital International Europe Australia Far East index gained about 15% against the U.S. dollar.

- Active equity products captured the largest amount of assets — $16.3 billion — with balanced accounts at $15.5 billion. Active fixed-income drew in $10.6 billion, while real estate attracted $7.6 billion.
- Assets invested in passive equity products were one-tenth the size of those invested in active equity, though overseas interest in quantitative products is just starting to

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## LATE NEWS

### Institutions finance realty firm

BOSTON — Four major institutional investors have invested $40 million in the form of participating senior-term notes in The Krupp Cos., a Boston-based real estate firm.

The syndicate is headed by U S WEST Financial Services Inc., Englewood, Colo., which invested $20 million. Other investors are Benefit Capital Management Co., the in-house pension fund management operation of Union Carbide Corp., Danbury, Conn., $10 million; Security Benefit Life Insurance Co., Topeka, Kan., $3 million; and Erie Insurance Exchange and Erie Family Life Co., Erie, Pa., $7 million. Tom Mitchell, a senior account executive for U S WEST Financial, provided the identity of the investors and the amount invested.

The increased capitalization will allow Krupp Cos. to accelerate development of commercial and multifamily properties.

### California Employees allocates

SACRAMENTO, Calif. — The $43 billion California Public Employees' Retirement System has decided on allocations for its 12 managers in its $4.25 billion foray into international markets.

The decision was made to follow the recommendations of its asset allocators, First Chicago Investment Advisors, Chicago, and TCW Global, Los Angeles, each of whom will manage up to $100 million, said Basil Schwan, acting investment manager.

Global equity managers County NatWest Investment Management Ltd., London, and Fidelity International Investment Advisors, Boston, each were allocated $350 million; State Street Bank and Trust Co., Boston, was allocated $1.05 billion for passive equities; Nomura Capital Management, New York, $200 million for Pacific Basin regional equity; Warburg Investment Management International, New York, and Fiduciary Trust Co. International, New York, were each allocated $500 million for global fixed income; Baring International Investment LTD., Boston, $500 million for international fixed income; and $200 million each was allocated to active international equity investors Morgan Grenfell Investment Services Ltd., London, Oechsle International Advisors, Boston, and Schroder Capital Management International, New York.

Mr. Schwan said the allocations will begin next month and will be funded monthly through cash reserves and $300 million-a-month cash flow.

### Post-retirement draft completed

NORWALK, Conn. — The Financial Accounting Standards Board at its Aug. 10 meeting put the finishing touches on a proposed rule concerning accounting for post-retirement benefits.

An exposure draft is expected to be presented before the end of September with a final standard issued in late 1989. At the meeting, FASB executives decided net periodic benefit cost should be spread out over the period that extends from the date of hire to the expected retirement date. The board also decided the minimum liability would be measured as the unfunded accumulated benefit obligation for retirees.

### Funds make manager changes

• WASHINGTON — The $1.1 billion District of Columbia Retirement Board has purchased an $8.5 million interest in Chicago-based JMB Institutional Realty Corp.'s Group Trust I and has terminated Affirmative Investment Management, New York, said Adrien Anderson, executive director.

The JMB Group Trust I, a $158 million closed-end fund, invests in retail and office properties. The board acquired the shares from an undisclosed investor. The assets came from cash flow.

Affirmative, a unit of Daniels & Bells, was terminated because of reorganizational changes that directly affected the firm's relationship with the board, Mr. Anderson said.

• OKLAHOMA CITY — The $1.3 billion Oklahoma Public Employees Retirement System has shuffled its investment management mix to reflect a recent asset allocation study.

Rex Privett, executive director, said First Investment Management, Oklahoma City, will manage a $650 million balanced portfolio; Sun Bank Investment Management Group, Orlando, Fla., $200 million in equities; JMC Capital Management, Metairie, La., a $7 million small-capitalization portfolio; and Wright Investors Service, Bridgeport, Conn., $200 million in bonds.

Wright and First Investment had managed balanced portfolios along with Bank of Oklahoma, which was let go.

The fund hired Northern Trust Co., Chicago, as its master custodian. SEI Funds Evaluation, Houston, assisted.

• LOWELL, Mass. — The $18 million Colonial Gas Co. pension fund has hired Keystone Investment Management Corp., Boston, to run $7.5 million in a balanced account, said Charles A. Cook, vice president-human resources.

The assets came from a reduction in the the assets run by Webster Capital Management, New York, its sole balanced manager. Hoenig Investment Advisory Service, Boston, assisted.

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Vol. 16, No. 18 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1988.

# Pension funds win with bet on Bayou

By Trudy Ring

LA PLACE, La. — A contrarian investment in a steel mini-mill operator during the steel industry's trough has produced handsome returns for pension funds and venture capitalists.

Bayou Steel Corp., La Place, went public in late July with an offering of 3.8 million shares at $13 each. Investors who put up equity financing for the company in 1986 have seen the return of their entire initial investment, plus retained common stock in the company, valued at six times the original cost.

A group of investors bought the company in September 1986 from Voest-Alpine AG, an Austrian state-owned corporation, with $21.5 million in equity capital and the issuance of $60 million in high-yield bonds. Principal shareholders include the Allied-Signal Inc. pension fund, Morristown, N.J.; Alan Patricof Associates Inc., a venture capital firm; First Capital Corp. of Chicago, a bank venture capital operation; Allen & Co. Inc., New York, an investment banking firm; and Howard M. Meyers, the entrepreneur who assumed management of Bayou Steel.

The 3.8 million shares in the public offering were newly issued; previous shareholders retain 9 million shares and have agreed not to sell or transfer them until either three years from the time of the offering or until Bayou Steel's tax-loss carryforwards have expired, been fully used or become subject to limitations under the Internal Revenue Code.

Allied-Signal put $2 million of its $4.5 billion defined benefit assets into Bayou Steel equity, said Edward T. Tokar Jr., vice president-investments.

"It was bought at a very attractive price, has outstanding management, and the cycle turned in a significant way in our favor. You add it together and it's a home run," he said.

Alan Patricof Associates invested $2.5 million from three of the funds it runs. The firm made the $2.5 million back at the offering and carries stock valued at six times that amount, said John Baker, vice president.

APA's limited partners in the deal include the New York State and Local Retirement Systems and New York State Teachers' Retirement Fund, both of Albany; the Texas Instruments Inc. pension fund, Dallas; the Gannett Co. Inc. pension fund, Arlington, Va.; the Ontario Municipal Employees' Retirement System, Toronto; and venture capital managers, First Chicago Investment Advisors and Mitchell Hutchins Institutional Investors Inc., New York.

APA was attracted to the deal because of the involvement of Mr. Meyers, who became chairman, president and chief executive officer upon the investor group's acquisition. Several years ago, the firm had backed Mr. Meyers in RSR Corp., a Dallas-based smelting business of which he also is president.

"We start out asking ourselves, 'Is the guy a money maker?' " Mr. Baker said. Mr. Meyers already had shown he was one with RSR and did so again with Bayou Steel, Mr. Baker said.

John Canning, president of First Capital Corp., echoed those sentiments. "You had a fabulous manager in Howard Meyers. You had a battle-weary shareholder (Voest-Alpine) who wanted to get out of the operation and you had a tremendous manager."

First Capital was the deal's largest investor with $7 million. First Capital is a subsidiary of First Chicago Corp.; it invests the banking firm's own capital.

At Bayou Steel, Mr. Meyers and his management team rearranged the mill's equipment to smooth out production flow and increase capacity; renegotiated a contract with the United Steelworkers of America to increase flexibility in operations while providing pay and benefit increases; and emphasized the use of low-cost barge transportation on the neighboring Mississippi River, Mr. Baker said.

Bayou Steel had a net loss in each fiscal year from 1981 until 1986. The company posting net income of $3.2 million for the year ended Sept. 30, and $12.8 million in the six months ended March 31. ■

# Global flows change

## Assets moving to Europe

By Marlene Givant

International stock managers are pouring money into Continental Europe and smaller Pacific Basin markets, attracted by what they consider good values.

During the second quarter, the median international stock portfolio analyzed by InterSec Research Corp., Stamford, Conn., had 27% in Continental Europe vs. 24.8% the previous quarter. Continental Europe represented 18.9% of the Morgan Stanley Capital International Europe Australia Far East index as of June 30.

Meanwhile, the median portfolio's exposure to Pacific Basin markets, excluding Japan, escalated 24% to 9.2% from 7.4% as of March 31. That's almost double the 4.7% the region represents in the EAFE index.

In addition to cheap companies, Continental Europe has rosier growth prospects, noted managers bullish on the region.

Alliance Capital Management, London, invests a hefty 45% in Continental Europe, mainly in Germany, Switzerland and Holland.

"At last there's some earnings momentum, and I think earnings there will beat the estimates," said Mark Breedon, vice president of the firm, which runs $800 million for U.S. tax-exempt clients. In Germany, the firm favors chemical companies **Bayer, Hoechst** and **BASF** and engineering firms such as **MAN** and **Thyssen**.

Acadian Financial Research Inc., Boston, which runs $42 million for U.S. tax-exempt clients, is overweighting a number of Continental European markets in its risk-control core portfolios, largely because the region's price-earnings ratio is only 12.

"Continental Europe is more attractive than capitalization weights in the index would indicate," said Ronald Frashure, executive vice president. Investors might have underestimated the region's prospects given measures to harmonize intra-European trade by 1992, he added.

Acadian has more than 5% each in Switzerland, France, Belgium and Italy. French holdings in the firm's small-cap portfolios include **Penarroya**, a non-ferrous metals company, and **Vallourec**,

*Continued on page 59*

**Geographic asset allocation of non-U.S. portfolios**

| | InterSec median portfolio | | EAFE | |
|---|---|---|---|---|
| Country/region | 2nd qtr. | 1st qtr. | 2nd qtr. | 1st qtr. |
| Japan | 37.8 | 39.9 | 62.6 | 64.4 |
| Other Pacific Basin | 9.2 | 7.4 | 4.7 | 4 |
| United Kingdom | 15.9 | 16.2 | 12.9 | 13 |
| Continental Europe | 27 | 24.8 | 18.9 | 18.6 |
| Other | 3.3 | 2.7 | 0.9 | 0 |
| U.S. cash | 3.3 | 4.1 | 0 | 0 |

Source: InterSec Research Corp., Stamford, Conn.

## Japanese wary of America

By Joel Chernoff and David Kilburn

**Despite the U.S. dollar's recovery against the yen this year, Japanese institutional investors are taking a cautious approach to investing in U.S. markets.**

**Japanese investors were severely burned by the dollar's 50% fall against the yen during the past three years.**

**"I think people are still very cautious about investing outside Japan due to the exchange rate situation," said Kiyotoshi Aiba, director-investment management, Yamaichi International Capital Management Co. Ltd., Tokyo.**

**"In overall terms, the Japanese institutional investor is still extremely cautious and it is unlikely they will make any major decisions regarding investment in the U.S.A. until they have a clearer picture about exchange rate movements, interest rates and improvements in the U.S. economy," said Yasukazu Akamatsu, senior managing director, Daiwa International Capital Management Co. Ltd., Tokyo.**

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MASTER TRUST

# Pension execs, advisers content with services

By Trudy Ring

Corporate pension executives and money management firms report a high degree of satisfaction with master trust banks' services, according to *Pensions & Investment Age's* biennial surveys on the subject.

Pension executives and money managers were surveyed separately and asked to rate master trust banks on a scale of 1 (poor) to 5 (excellent) in a variety of categories. Overall ratings were derived from category responses. In both surveys, every bank rated by at least three respondents received an overall rating no lower than 3.

Mellon Bank, Pittsburgh, was tops among corporate pension executives; it got a perfect 5. That was derived from ratings of 5 in each category of the survey: personnel, cash management, reporting and computer programs. Mellon Bank was rated by six respondents.

The bank's rating rose from the 1986 survey, when it received an overall 4.1 and ranked third. It was rated by 11 pension executives that year.

Boston Safe Deposit & Trust Co.'s rating from corporate pension executives dipped to 4 this year from its 1986 rating of 4.5; it topped the survey in 1986. It was rated by four respondents this year, down from six two years ago. It had an average rating of 4 in each category.

National Bank of Detroit, which ranked second with 4.3 in the 1986 pension executives' survey, had an overall rating of 4 this year from four respondents. It received that rating in each category except personnel, where it received a 5.

Although pension executives did not hesitate to give ratings of 3 or 4 to their master trustees, they were selective about giving perfect ratings. The only other bank to receive a 5 rating in any category was Harris Trust and Savings Bank, Chicago, which got that mark for its cash management services. It received a 4 in each of the other categories and a 4 overall.

The banks rated by the greatest number of pension executives were Bankers Trust Co., New York, rated by 16 respondents; Northern Trust Co., Chicago, rated by 15; and Chase Manhattan Bank, New York, rated by 11. Each had an overall rating of 4.

Pension executives also seem to be satisfied with their master trust banks' fees. Sixty-two respondents called their master trustee fees average, 10 called the fees high and seven called them low.

Money managers also indicated satisfaction in their dealings with master trust banks. The lowest overall rating assigned to any bank ranked by at least three managers was 3.1.

Managers were asked to rate banks on security clearance; updating of cash and transaction activity; automatic investment of cash balances; prompt crediting of cash; reporting accuracy; capabilities of the account representative; cooperation of the institution; global custody services (where applicable); and overall.

Managers, in a ratings to smaller, regional banks. Marshall & Ilsley Trust Co., Milwaukee, received the best overall rating, 4.5. It was rated by six money managers.

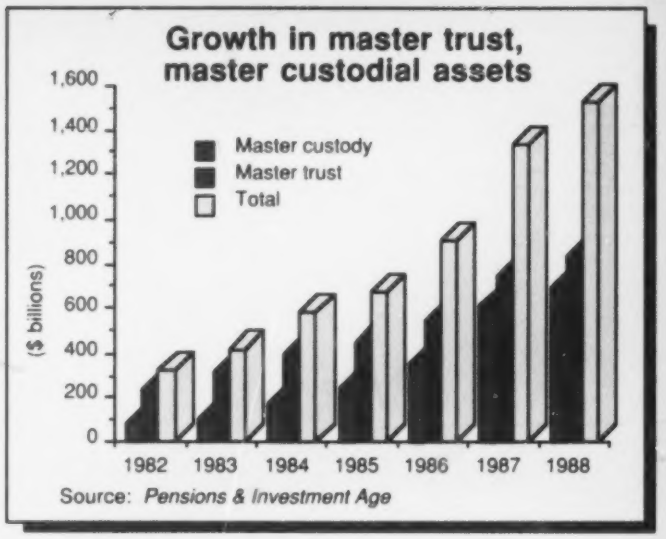
Following it were Ameritrust Co., Cleveland, and Wilmington Trust Co., Wilmington, Del., both with 4.4 overall. Ameritrust was rated by nine managers and Wilmington Trust by five.

None of those three had enough responses from pension executives to be included in the results for that survey. Only 12 master trust banks drew ratings from at least

*Continued on page 39*

# Custodians pace moderate growth

By Carol Wiley




Tax-exempt assets held in the nation's largest master trustee and master custodial banks increased by a comparatively modest 12.6% for the 12 months ended June 30, and, once again, master custodial assets increased at a higher clip than those in master trustee accounts.

Tax-exempt assets held by the 30 largest master trust and master custodial banks rose to $1.526 trillion from $1.355 trillion the year before, according to data obtained in a survey by *Pensions & Investment Age* of banks with at least $2 billion in combined master trust and master custodial assets. During the year ended June 30, 1987, assets had increased 46%, primarily triggered by the bull market and new business.

In the year ended June 30, 1988, master custodial assets rose almost 14% to $693 billion from $608 billion; master trust assets rose 11.5%, to $832 billion from $747 billion.

The increase in master custodial assets is due to the increased use of custodians by public pension plan sponsors, according to Rodger F. Smith, partner, Greenwich Associates, Greenwich, Conn.

Because of the growing complexity of record keeping, more public funds are opting for master custody banks rather than handling the job internally, Mr. Smith said.

Master trust banks are legally responsible for multiple plans with multiple managers, and for single plans with multiple managers. Master trustees provide unitized reporting, accounting and performance measurement services for their clients, which primarily are corporate pension plans. Master custody banks provide the same services, but their clients — primarily public funds, endowments and foundations — retain legal trusteeship.

Larger pension funds, which usually have multiple managers, most often use master trust banks.

A Greenwich study confirms the increased use of master custody banks by public pension funds. Ninety-one percent of the 290 public pension funds surveyed in 1987 reported using a master custody bank, up from 89% in 1986, 88% in 1985 and 85% in 1984.

Master trust use, however, has not increased in the past two years, according to Greenwich statistics. The study shows 73% of the 1,005 large corporate pension plans surveyed use master trusts, the same percentage as in 1986. Seventy percent in 1985 used master trust banks, 66% in 1984 and 64% in 1983.

More than 90% of the 200 largest industrial companies and more than 90% of the plans with assets of more than $500 million now use master trusts, according to the survey.

New, large pension clients no longer account for growth in master trust assets because, as the Greenwich statistics bear out, most pension plans already have selected their master trust banks, according to Mike Wright, consultant with The Wyatt Co., Boston.

New business now comes from clients unhappy with their current master trustee, and from corporate spinoffs, in which new divisions or subsidiaries need a master trustee and hire one different from the parent company, Mr. Wright said.

The major master trust banks also are going after smaller pension funds.

"The big ones — the Mellons, the State Streets — are taking smaller accounts, those in the $50 million to $100 million range, because the others have penetrated the market," Mr. Wright said. "And with all of the merger and LBO activity, there are more pension funds that need master trustees."

State Street Bank and Trust Co., Boston, was again the largest provider of master trust and master custodial services in the *P&I Age* survey, gaining half a percentage point in market share although its total assets were down $655 million from 1987 figures. State Street's assets declined to $190.235 billion, from $190.89 billion in 1987. Its share of the market, however, went to 12.5% from 12%.

State Street lost close to $2.4 billion in master trust assets, dropping to $90.83 billion, and gained about $1.7 billion in master custodial assets, reporting $99.4 billion.

"Overall, a lot happened (in the year ended June 30) that had tremendous impact on the values of the master trust/master custodial marketplace," said Ronald Golz, State Street executive vice president.

"The market effect in October was fairly substantial. Assets

*Continued on page 38*

# Many believe global fees extreme

By Marlene Givant

Many pension fund executives think global custody fees are high and the quality of service average, according to a *Pensions & Investment Age* survey of corporate pension plan executives.

Assets under global custody for pension funds, endowments and foundations total $73.13 billion with the top five banks accounting for almost two-thirds of the assets.

State Street topped the list with $17.85 billion. It was closely trailed by Chase Manhattan Bank with $16.036 billion. Bank of America ranked third with $5.5 billion, followed by Bankers Trust with $5 billion and Irving Trust with $4.5 billion.

Many banks included on the list actually appoint other banks to provide global custody for them on a wholesale basis. One such wholesaler, Mitsubishi Bank of California, which does not work directly for pension funds, administers $6.3 billion in global custody assets for master trust banks. The $18.2 billion Chase has under global custody for other banks exceeds the $16.036 billion it has under global custody for U.S. tax-exempt funds directly. Chase's figures were as of March 31.

In the global custody survey, 35 of the 44 corporate pension fund executives responding said they use their domestic master trustee for global custody. This makes it difficult for new players to make inroads.

Mellon Bank/Pictet & Cie was chosen the top global custodian, earning an average rating of 5 on a scale of 1 (poor) to 5 (excellent) for overall global custody service. Northern Trust, State Street and Mitsubishi Bank averaged a 4 rating while Chase Manhattan and Bankers Trust averaged 3 in rank. All of these institutions were rated by at least two corporate pension executives.

In addition to custody, global custodians generally handle numerous other functions. According to Janet E. Potter, vice president and manager-capital markets services marketing and development of the Bank of America, San Francisco, these include: settlement; cash management; client reporting of realized/unrealized gains and losses for securities and cash in both local and base currencies; income accruals and receivables including dividend and tax reclamation; consolidated reporting for multiple portfolios; and global portfolio performance analysis, both historically and against world indexes.

Recent innovations in global custody include securities lending, multicurrency short-term investment funds and refined customer information systems, specifically PC-based interface technology, she added. Custodians also are boosting capabilities in emerging markets.

Pension executives are less pleased with service and charges for global custody compared with domestic accounts.

While almost all of the 83 pension executives surveyed on their domestic trustees rated the institutions a 4 (above average), only half of the 44 executives responding to the global custody survey rated over-

*Continued on page 39*

# Banks focus on fees

## Move on to trim global custody costs

By Marlene Givant

Cost-cutting is a top challenge of global custodians in the wake of increasing industry competition and client concern over high fees.

"Right now, I'm putting all my emphasis on how to reduce costs through automation," said Murray Steinberg, senior vice president in charge of global operations of Boston Safe Deposit & Trust Co., Boston.

"With competitive prices, people are beginning to use more than one global custodian, but it's difficult to administratively manage more than one," said Susan Beacham, vice president of Mitsubishi Bank of California.

Global custody fees range from three to 15 basis points for a passive international portfolio and 25 to 35 basis points for an active portfolio, assuming in either case a separate account of $100 million to $300 million or a commingled fund of $300 million to $1 billion, according to Mr. Steinberg.

Fees are high largely because of the number of middlemen. Global custodians generally use other banks overseas as subcustodians. "Sixty to 66% of all cost is because of subcustodial banks," said Mr. Steinberg.

Global custodians need U.S. staff to deal with foreign subcustodians and multicurrency accountants who might keep accounts in a client's base currency as well as local currencies.

And subcustodial banks overseas charge different fees; many charge extra for each separate account and each security issue as well as corporate action processing.

Some countries tax U.S. investors for such services as trading ex-dividend. And where investors can recoup tax payments, the subcustodian must do the expensive paper work.

Cross-border communications among all parties to a trade, foreign exchange transactions and physical securities settlement with various settlement periods and procedures among markets adds to the complexity and overall cost.

Adding an extra layer, some U.S. banks use other banks as global custodians for their clients.

Eliminating middlemen and boosting efficiency is the key to lower costs. Although failed trades still persist, representing about 40% of all trades, said Mr. Steinberg, progress is being made.

The Depository Trust Co. Trade ID System in the United States is working to create book-entry settlement of securities overseas, and Euroclear — a clearing system and central custodian for international markets — is putting certain common stocks worldwide in its system on a book-entry-type system like that used in the United States.

Meanwhile, banks are taking their own action. Northern Trust Co. bases prices of global custody services on the makeup of each client's portfolio in terms of size, transaction volume, countries invested in and special accounting and reporting requirements.

State Street Bank and Trust Co., Boston, recently unbundled its custody fees, using regional fee schedules and weighting fees according to where a client invests.

Mr. Steinberg said Boston Safe's volume doesn't yet justify an unbundled fee structure. Instead, Boston Safe is putting terminals in its banking and subcustodians' offices that can reach its Boston system directly to "increase productivity and reduce manual intervention."

Where automation with Boston Safe isn't feasible, a subcustodian will transfer settlement information to its U.S. office for forwarding to Boston Safe. Boston Safe also might open new offices abroad.

Bank of America is planning to expand its client base in key markets in Asia and Europe and provide services to regional financial institutions in the United States.

Morgan Stanley Global Services offers Morgan Stanley Capital International research, trade execution with Morgan Stanley & Co., foreign exchange and settlement and global custody through Morgan Stanley Trust Co. or any combination of the services. MSGS has a global data network linking transnational and domestic clearing organizations, agent banks and brokers. All parties are technologically linked, replacing the more common telex and facsimile.

In February, Bankers Trust Co.'s Global Fiduciary Services Group introduced Globe*Net, an international subcustodial network and integrated securities movement and cash control system for its global custody product, GlobeTrust. It also provides global accounting, reporting and performance measurement through its subsidiary, The WM Co., Edinburgh. ■

**U.S. institutions ranked by global custody assets**

| | $ millions |
|---|---|
| 1. State Street Bank | 17,850 |
| 2. Chase Manhattan [1, 2] | 16,036 |
| 3. Bank of America [2] | 5,500 |
| 4. Bankers Trust | 5,000 |
| 5. Irving Trust | 4,500 |
| 6. Northern Trust | 4,300 |
| 7. Boston Safe Deposit | 4,250 |
| 8. Citibank | 2,500 |
| 9. Mellon Bank/Pictet | 1,900 |
| 10. Harris Trust | 1,800 |
| 11. Morgan Stanley Trust [3] | 1,670 |
| 12. First Wachovia | 1,570 |
| 13. Continental Illinois | 1,500 |
| 14. Security Pacific | 1,200 |
| 15. Wilmington Trust | 1,143 |
| 16. First RepublicBank | 510 |
| 17. Nat'l Bank/Detroit | 500 |
| 18. First Pennsylvania Bank | 300 |
| 19. Bank of New York | 263 |
| 20. Norwest Bank Minnesota | 220 |
| 21. Centerre Trust | 154 |
| 22. United States Trust [4] | 134 |
| 23. Citizens & Southern Trust | 100 |
| 24. Ameritrust | 91 |
| 25. Mercantile-Safe Deposit | 88 |
| 26. First Interstate Bank | 24 |
| 27. First Trust | 10 |
| 28. Marshall & Ilsley Trust | 8 |
| TOTAL | 73,130 |

[1] As of March 31, 1988

[2] Excludes $19.2 billion under global custody for other banks

[3] These institutions are not ranked because they are not major players in the domestic master trust/custodial business

[4] As of Dec. 31, 1987

Many of these banks appoint other banks to handle at least some global custody assets.

When Ameritech needed a Master Trust who did they dial for information?

AMERITECH

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MASTER TRUST

# Banks key on problem solving

By Carol Wiley

In the competitive master trust business, banks are working harder than ever to hold on to their clients by solving problems as they arise.

Accuracy and timeliness of reports are still the common complaints of pension fund sponsors, and in the current competitive atmosphere, banks must address problems or risk losing clients.

"Large, corporate pension fund clients are few and far between," said Ronald Golz, executive vice president of State Street Bank and Trust Co., Boston, the nation's largest provider of master trust/master custodial services. "If they were to move because of poor service, every competitor would be after that piece of business. It's intensely competitive."

According to sponsors, consultants and bank officials, most complaints center on inaccurate reports. The most common ones heard by consultant Asghar Alam of The Wyatt Co., New York, are that the master trustee has not recorded stock purchases or sales on the right dates, and that the trust report does not balance.

"The basic problems continue to be basic capabilities — accuracy and how quickly the reports are delivered — the ABCs of the business," said Rodger F. Smith, partner with Greenwich Associates, Greenwich, Conn.

Mistakes in record keeping always have been — and always will be — an issue, according to Mike Wright, consultant with Wyatt's Boston office. There is no error-proof system, but "how quickly the bank corrects the mistakes is the issue . . . and how fast it can get the reports out," Mr. Wright said.

"Banks are upgrading their systems to adapt and to modify to meet changing needs," Mr. Smith said. "It takes a considerable amount of money for systems technology and the people who can use the system in a productive way. Every organization needs a major overhaul now and then."

Clients also complain about personnel, Mr. Wright said. "The first and easiest complaint is always about the account relationships," he said. "Is the master trust officer responsible; is he treating the sponsor the way he should be? As a result, there's an ongoing shuffling of personnel."

The client might leave because the bank is experiencing difficulties elsewhere in its business, not just on the master trust side, Mr. Golz said.

Such was the case for Vulcan Materials Co., Birmingham, Ala., which moved its business to The Northern Trust Co., Chicago, from First Republicbank, Dallas (now NCNB Texas National Bank), because of the Texas bank's financial difficulties, according to Robert W. Lee, vice president-compensation and risk management.

Also, clients of smaller master trust banks might find they have outgrown the services of their bank. For example, the client might want global custody services the bank does not provide, or the bank might not offer services for specialized investments, Wyatt's Mr. Alam said.

The $1.3 billion plan of North American Philips Corp., New York, has found "a lot of pass-throughs and other types of investments are hard for banks to price and collect income and credit properly," said Kathleen Pino, pension finance administrator. Some banks have a different pricing system for bonds or might rely on different reports for information than the pension fund's investment managers, she said.

The Long Island Railroad, Jamaica, N.Y., whose defined benefit plan totals $115 million, experienced a two-day delay cabling assets to its master trustee, National Westminster Bank, New York, for purchases; encountered variations in pricing of zero-coupon bonds; and learned Natwest made mistakes in purchasing securities issues for its portfolios, according to Vincent Wing, manager of investment analysis.

To correct the problems, North American Philips and the Long Island Railroad hired Hamilton & Co., Princeton, N.J., a consulting firm that works with master trustee banks.

Hamilton & Co. provides monthly audits of the master trust procedure by replicating the entire process for its clients, comparing its reports with bank reports and reconciling the differences with the bank. What results, according to Susan Crotty, Hamilton's managing director, "usually leads to better management on everyone's part."

"Normally, you get better service from the custodian, because you have someone looking and watching over their shoulder, and you have the client calling with the problems," Ms. Crotty said.

Banks have responded favorably to the audit process, she added. ■

## Austin funds select bank as custodian

AUSTIN, Texas — Two Austin municipal funds have chosen The Northern Trust Co., Chicago, as master custodian for their combined assets.

The $549 City of Austin Employees Retirement and Pension Fund and the $50 million City of Austin Police Retirement Fund chose Northern Trust as the first master custodian for the two funds. Custody of the funds previously had been with the city treasurer.

Cathy Harrington, city pension officer, said Northern was selected following a nationwide search conducted by the city with assistance from its consultant, Callan Associates Inc., San Francisco.

"We were impressed with their (Northern's) internal capabilities and with the quality of people assigned to our account," said Ms. Harrington.

The primary service the city sought was in the custodial area, but the city also plans to make use of other services, such as securities lending, offered by Northern Trust. ■


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# First Penn set to compete

By Fred Williams

PHILADELPHIA — America's oldest commercial bank might not be the largest, but First Pennsylvania Bank has emerged as a major player in the master trust/master custody business by carefully targeting its clientele and making a strong commitment to the business.

While still considered a regional bank, First Penn — established in 1782 — has grown to become the 14th largest master trust/master custody bank in *Pensions & Investment Age*'s annual survey, with $32.5 billion in combined assets, $28.6 billion of which is in master custodial accounts.

Officials at First Penn challenge the prevailing sentiment among many consultants and money center banks that the master trust/master custody business will be consolidated among the top five or six master trust banks.

"There have been questions because we are smaller relative to other banks like Chase and Northern Trust, but we have committed substantial dollars to this business, we have committed to stay in the business and will commit whatever dollars it takes to maintain our systems," said Stuart Saunders Jr., executive vice president and head of First Penn's trust and investment services group.

First Penn targeted the master trust/master custody business in 1983, said Mr. Saunders. Its first account was the $8 billion Commonwealth of Pennsylvania Retirement System, and the bank has focused its attention on public pension plans. It since has been named master custodian for the $1.6 billion City of Philadelphia Municipal Pension Fund and the $4.2 billion Alaska State Retirement System.

An official in the Alaska state treasurer's office, Juneau, said the system had been using Bank of America, San Francisco, before hiring First Pennsylvania in 1984.

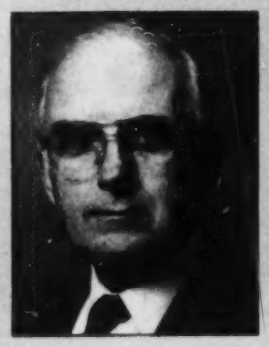
"We went through the normal state contracting procedure in requesting proposals, and we decided on a smaller regional bank where we would be a more significant customer," the official said.

He said the distance between Juneau and Philadelphia isn't a problem because of technological advances in electronic data transmission and the telephone.

For items requiring a signature, the system uses a facsimile to send and receive documents.

Alaska's officials might not mind the bank not being nearby, but other clients selected First Penn because of its location.

Rudolph Peins, senior vice president at Hunt Manufacturing Co., Philadelphia, said Hunt "looked at the market" before selecting First Penn. "But our primary objective was to work with a Philadelphia firm. We believe they provide the type of service we wanted, but they had to be a Philadelphia firm where we would have access to someone in the bank when we needed them."



**First Penn's Stuart Saunders Jr. (above) and James F. McHale say the bank is holding its own in master trust/master custody business.**

He said he has been "delighted" with First Penn's performance as master trustee for its pension assets. He declined to specify the total assets in the Hunt plan, but as of October 1986 the fund had $11.2 million, according to the 1988 Money Market Directory.

Tim Roof, consultant in the Philadelphia office of Hewitt Associates, said he's not surprised First Penn has been successful in the master trust/master custody area.

"I get the impression that they have taken a strategic approach to the business and picked their target and made the commitment to the business."

First Penn offers the traditional range of master trust services, including securities lending, accounting, asset administration, portfolio analysis, performance measurement, reporting and global custody. One distinguishing feature is an on-line interface with the bank's accounting system that provides account information regarding transactions, asset data and performance measurement. The system can be customized to provide specific files for clients, said Mr. Saunders.

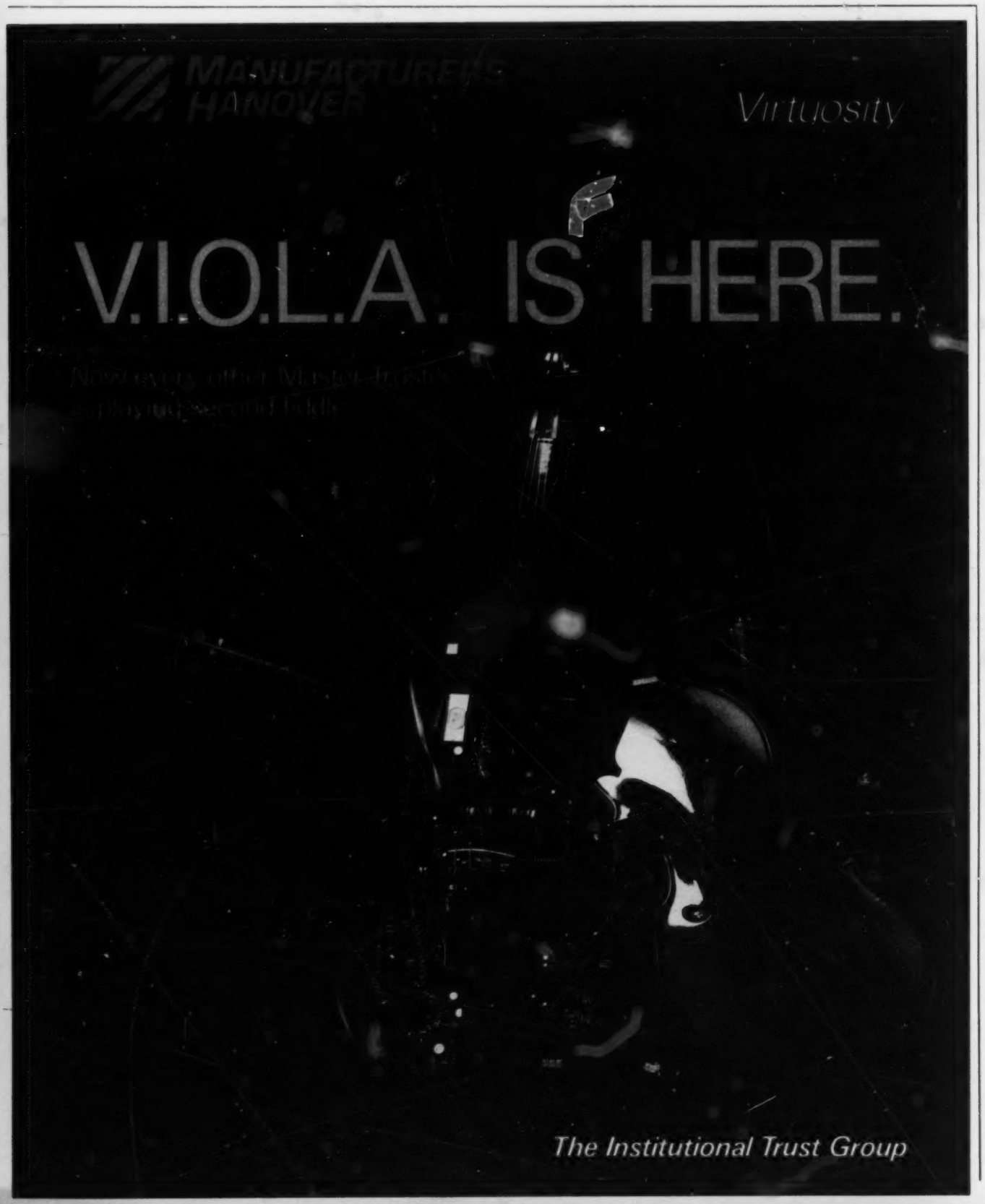
"We don't think anyone in the country has one like it," he said. "The system was designed internally by trust bankers to serve this business."

Client terminals are provided at the user location and allow the user to view asset positions as well as a chronological listing of account activity from the last report date up to the past three months.

James F. McHale, senior vice president and manager of First Penn's trust business development department, emphasized the role of smaller regional banks in the master trust business.

"We have been told by the top five or six master trust banks that there is no room in this business for second-tier master trust banks. We strongly disagree. The top five or six banks have asset levels of over $120 billion each. It is very difficult to give quality services to users at that level.

"Second-tier banks with $30 billion to $50 billion, as long as they have the proper systems to be in the business, can compete effectively." ■



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## Ameritrust Co.

900 Euclid Ave., Cleveland, Ohio 44101; (216) 687-4089

| | |
|---|---|
| Domestic master trust | $3,715,000,000 |
| Domestic master custodial | $10,463,000,000 |
| Global custody | $91,000,000 |
| Domestic master trust clients | 42 |
| Domestic master custodial clients | 17 |
| Global custody clients | 4 |
| Account supervisors | 3 |

Ameritrust Co.'s domestic master custodial assets increased $7.177 billion in the year ended June 30.

The primary accounting method is trade date. Accrual accounting is offered.

Services offered in the basic master trust/master custodial agreement are automated cash management, pension benefit payments, security processing, custody services, performance measurement and Ameriscan on-line inquiry.

Services available for additional fees are TUCS, participant record keeping and investment management services.

Monthly transaction reports are available in five business days; asset and liability reports, in five business days; and performance measurement reports, in 15 calendar days. All are available on-line.

Fees for domestic services are based on market value of assets and individual services; fees for global services are based on transactions and asset size.

Countries covered by the global custody services are Canada, Italy, South Africa, France, Denmark, Japan, Sweden, Finland, Belgium, Norway, the Netherlands, Mexico, Australia, Singapore and Hong Kong.

The client contact is Gary W. Queen.

## The Bank of New York

48 Wall St., New York, N.Y. 10015; (212) 495-1784

| | |
|---|---|
| Domestic master trust | $43,884,000,000 |
| Domestic master custodial | $54,100,000,000 |
| Global custody | $263,000,000 |
| Domestic master trust clients | 88 |
| Domestic master custodial clients | 19 |
| Global custody clients | 29 |
| Account supervisors | 16 |

The Bank of New York's domestic master trust assets rose $2.784 billion in the year ended June 30; domestic master custodial assets rose $2.1 billion; and global custody assets rose $118 million.

The primary accounting methods are trade and actual settlement date. Average cost, tax lot basis, amortized cost and liability accounting are offered.

Services offered in the basic master trust/master custodial agreement are global safekeeping, full trust administration services, cash management, fail float, portfolio accounting, custom reports, integrated on-line services, ERISA reporting and client training.

Available for additional fees are automated equitable accounting, benefit payment services, PC-driven report enhancer, performance measurement and analytics, securities lending and consulting services.

Monthly transaction reports are available on-line the next day and in hard copy form in 3 to 5 days; asset and liability reports, next day on-line; and performance measurement reports, in 20 days. All reports are available on-line.

Fees for domestic services are negotiated individually based upon asset value, portfolio structure and other required services; fees for global services are calculated by country and activity.

Countries covered by the global custody services are Australia, Belgium, Canada, Italy, Mexico, France, West Germany, Switzerland, Spain, the United Kingdom, Norway, Sweden, Japan, Finland, Denmark, Hong Kong, the Netherlands and South Africa.

The master trust and global custody client contact is Roy P. Lanza, vice president.

## Bankers Trust Co.

280 Park Ave., 8 West, New York, N.Y.; (212) 850-2037

| | |
|---|---|
| Domestic master trust | $135,586,000,000 |
| Domestic master custodial | $35,500,000,000 |
| Global custody | $5,000,000,000 |
| Domestic master trust clients | 301 |
| Domestic master custodial clients | 85 |
| Global custody clients | 58 |
| Account supervisors | 60 |

Bankers Trust Co.'s domestic master trust assets rose $7.905 billion in the year ended June 30; and domestic master custodial assets rose $1.841 billion.

Its primary accounting methods are trade and contractual date, on a fully accrued basis.

Tax-lot and cost-basis accounting are offered.

Services offered in the basic master trust/master custodial agreement are cash management, safekeeping of assets, transaction processing, accounting, reporting, investment manager liaison and legal and regulatory updates.

Services available for additional fees are securities lending; global custody; performance measurement and analytics; on-line access to accounting and performance data as well as external data bases, customized reporting and graphics; benefit payments; investment management; actively managed STIFs for ERISA and non-ERISA assets; discount brokerage; consulting; dividend reinvestment program; trade execution monitoring; and participant record keeping.

Monthly transaction reports are available in three business days; asset and liability reports, in seven to 10 business days; and performance measurement reports, in 15 business days. All of these reports are available on-line.

Fees for domestic services are negotiated based upon the costs associated with each client's specific requirements; fees for global services are based on transaction volumes, assets size and distribution across markets.

Countries covered by the global custody services are Australia, Austria, Belgium, Canada, Denmark, Finland, France, West Germany, Hong Kong, Ireland, Italy, Japan, Luxembourg, Malaysia, Mexico, the Netherlands, New Zealand, Norway, Portugal, Singapore, South Africa, Spain, Sweden, Switzerland, Thailand and the United Kingdom.

The client contact is Frederik L. Bailey, vice president.

## Boston Safe Deposit and Trust Co.

1 Boston Place, Boston, Mass. 02108; (617) 722-7314

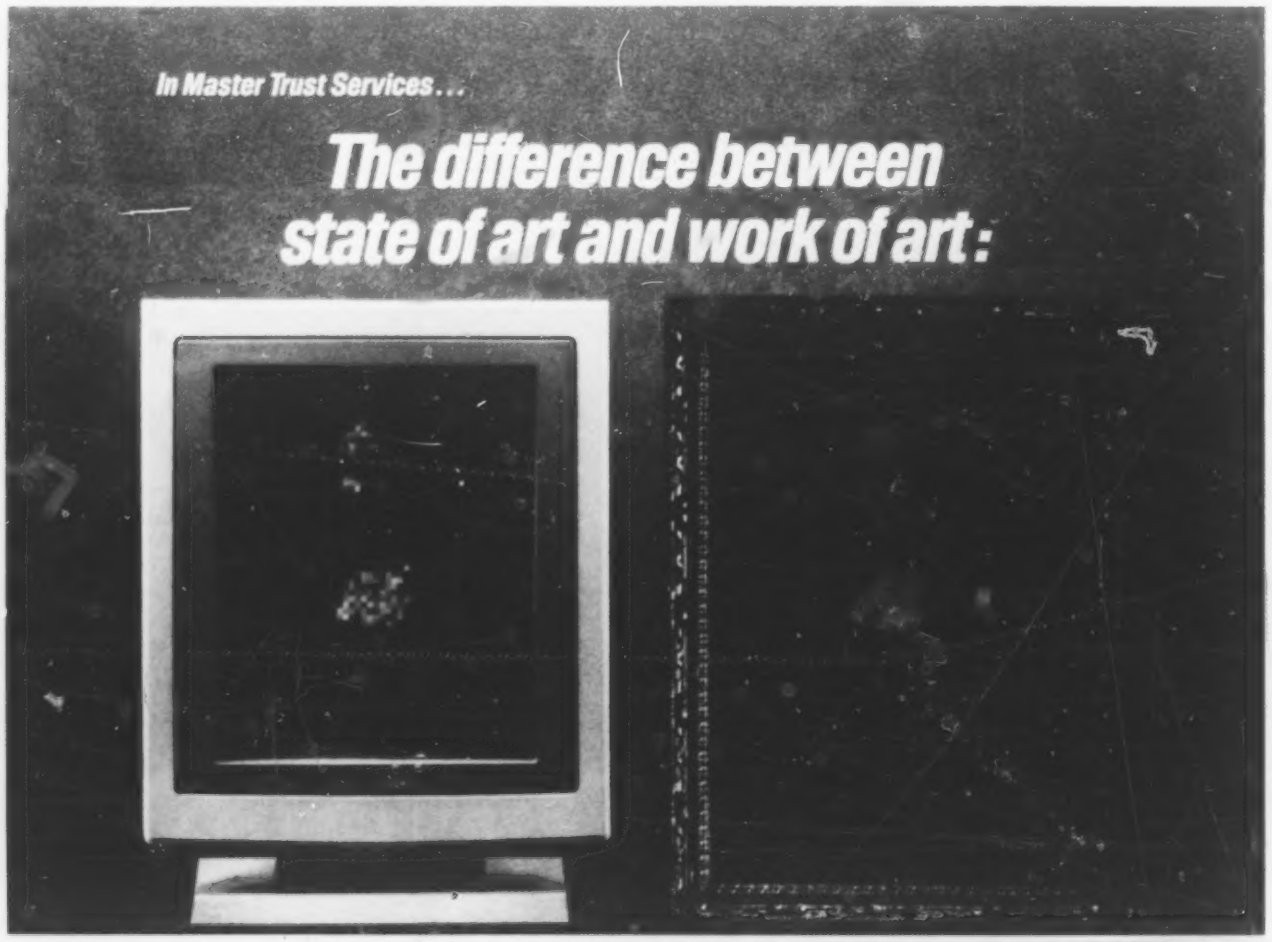
| | |
|---|---|
| Domestic master trust | $38,623,000,000 |
| Domestic master custodial | $75,996,000,000 |
| Global custody | $4,259,000,000 |
| Domestic master trust clients | 47 |
| Domestic master custodial clients | 31 |
| Global custody clients | 32 |
| Account supervisors | 23 |

Boston Safe Deposit and Trust Co.'s domestic master trust assets rose $4.895 billion in the year ended June 30; domestic master custodial assets rose $22.763 billion; and global custody assets increased $1.906 billion.

The primary accounting method is a true trade date, daily full accrual, multicurrency accounting system. The accounting system also interfaces daily with a cash basis securities control system.

Services offered in the basic master trust/master custodial agreement are safekeeping of assets, cash management and securities processing, and daily full accrual trade date-based accounting and reporting.

Available for additional fees are securities lending, global custody, benefit payments, participant record keeping, structured investment products, real estate, active management, performance measurement and analysis, on-line access, Master Workstation and consulting services.


*the hands of a master.*

At First Pennsylvania Bank, advanced technology is only part of the picture. Our clients receive personalized service from a staff of professionals well practiced in the art of master trust/custody administration ...over $30 billion in assets and growing.

This experience and individual attention to your account allow us to design an administrative plan for you that's flexible and responsive, from a palette of services that includes portfolio reporting, analysis and comparison, securities lending, direct dial-up access, and more. And each plan is as distinctively different from any other as a work of art is from a computer portrait.

For more information, or a look at some typical examples in our gallery of master works, call James F. McHale, Senior Vice President, Trust and Investment Services Group, at (215) 786-7946.

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Philadelphia, PA 19101

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FPB-100

Monthly transaction reports are available in three days; asset and liability reports, in five days; and performance measurement reports, in 10 days. All accounting and performance measurement reports are available on-line.

Fees for domestic services are calculated on an individual basis; fees for global services are computed on a basis-point charge against the market value of the portfolios, plus a transaction fee.

Countries covered by the global custody services are Australia, Austria, Belgium, Canada, Denmark, Finland, France, Hong Kong, Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, the Philippines, Portugal, Singapore, South Africa, Spain, Sweden, Switzerland, Thailand, the United Kingdom and West Germany.

The client contact is John L. Carty, senior vice president.

## Centerre Trust Co.

510 Locust, St. Louis, Mo. 63101; (314) 436-9691

| | |
|---|---|
| Domestic master trust | $1,632,000,000 |
| Domestic master custodial | $4,581,000,000 |
| Global custody | $154,000,000 |
| Domestic master trust clients | 8 |
| Domestic master custodial clients | 34 |
| Global custody clients | 2 |
| Account supervisors | 12 |

Centerre Trust Co.'s domestic master custodial assets rose $556 million in the year ended June 30; global custody assets increased $42 million.

The primary accounting method is trade date and accrual. Settlement date is offered.

Services offered in the basic master trust/master custodial agreement are performance measurement/risk analysis, participant record keeping, assistance in ERISA reporting requirements, automatic sweep cash management and portfolio review.

Services available for additional fees are on-line reporting and securities lending.

Monthly transaction reports are available in five business days; asset and liability reports, in five business days; and performance measurement reports, in 10 business days. All are available on-line.

Fees for domestic and global services are based on market value.

Europe and the Pacific Basin are covered by the global custody services.

The client contact for master trust service is Robert Mathieu, assistant vice president; the contact for global custody service is Richard Hibbs, senior vice president.

## The Chase Manhattan Bank

1211 6th Ave., 30th Floor, New York, N.Y. 10036; (212) 730-3057

| | |
|---|---|
| Domestic master trust | $63,200,000,000 |
| Domestic master custodial | $85,000,000,000 |
| Global custody | $16,036,000,000 |
| Domestic master trust clients | 122 |
| Domestic master custodial clients | 70 |
| Global custody clients | 86 |
| Account supervisors | 34 |

The Chase Manhattan Bank's domestic master trust assets rose $1.15 billion in the year ended June 30; domestic master custodial assets increased $2.95 billion; and global custody assets grew $2 billion.

The primary accounting method is fully accrued, trade date. Settlement and tax lot accounting are offered.

Services offered in the basic master trust/master custodial agreement are custody, accounting, reporting, transaction processing, income processing, cash sweep and corporate action and proxy notification.

Services available for additional fees are securities lending, benefit payments, global custody, securities lending (domestic and global), performance measurement and analytics (domestic and global), on-line access (domestic and global accounting and performance) and consulting.

Domestic monthly transaction reports are available in two business days; domestic asset and liability reports, in five to seven business days; and domestic performance measurement reports, in five to 10 business days after accounting reports are rendered. Global accounting reports are available in three to seven business days; global performance reports are available in seven to 10 days after accounting reports are rendered. All are available on-line.

Fees for domestic and global services are based on market value, transaction type and volume, and portfolio type and volume.

Countries covered by the global custody services are Argentina, Australia, Austria, Belgium, Brazil, Canada, Channel Islands, Chile, Denmark, Finland, France, West Germany, Greece, Hong Kong, Ireland, Italy, Japan, Jordan, Luxembourg, Malaysia, Mexico, the Netherlands, New Zealand, Norway, the Philippines, Portugal, Singapore, South Africa, Spain, Sweden, Switzerland, Thailand, Turkey and the United Kingdom.

The master trust client contact is Hortensia Sampedro, vice president; the global custody client contact is Peter Derrenbacher, vice president.

## Citibank

153 E. 53rd St., New York, N.Y. 10043; (212) 559-1523

| | |
|---|---|
| Domestic master trust | $28,247,000,000 |
| Domestic master custodial | $74,714,000,000 |
| Global custody | $2,500,000,000 |
| Domestic master trust clients | 321 |
| Domestic master custodial clients | 133 |
| Global custody clients | 5 |
| Account supervisors | 66 |

Citibank's domestic master trust assets rose $303 million in the year ended June 30; domestic master custodial assets rose $18.812 billion; and global custody assets rose $300 million.

The primary accounting method is trade date. Settlement date is offered.

Services offered in the basic master trust/master custodial agreement are safekeeping and custody, cash management, trade date reporting, ERISA reporting, equitable share accounting and on-line information management.

Services available for additional fees are flexible reporting (Citicorp Portfolio Analyst), investment performance evaluation and TUCS comparisons, global custody, securities lending, participant record keeping and DRIP service.

Monthly transaction reports are available in three business days; asset and liability reports, in five to seven business days; and performance measurement reports, in 15 business days after all information is received. All reports are available on-line.

Fees for domestic services are based on individual services; fees for global services are dependent upon countries and investment strategy.

Countries covered by the global custody services are Argentina, Austria, Australia, Belgium, Brazil, Canada, Denmark, Finland, France, Greece, Hong Kong, Ireland, Italy, Japan, Korea, Luxembourg, Malaysia, Mexico, the Netherlands, New Zealand, Norway, Philippines, Portugal, Puerto Rico, Singapore, South Africa, Spain, Sweden, Switzerland, Taiwan, Thailand, the United Kingdom and West Germany.

Wolfgang Strauss, vice president, is master trust client contact; Mark Aprahamian, vice president, is global custody client contact.

## Citizens and Southern Trust

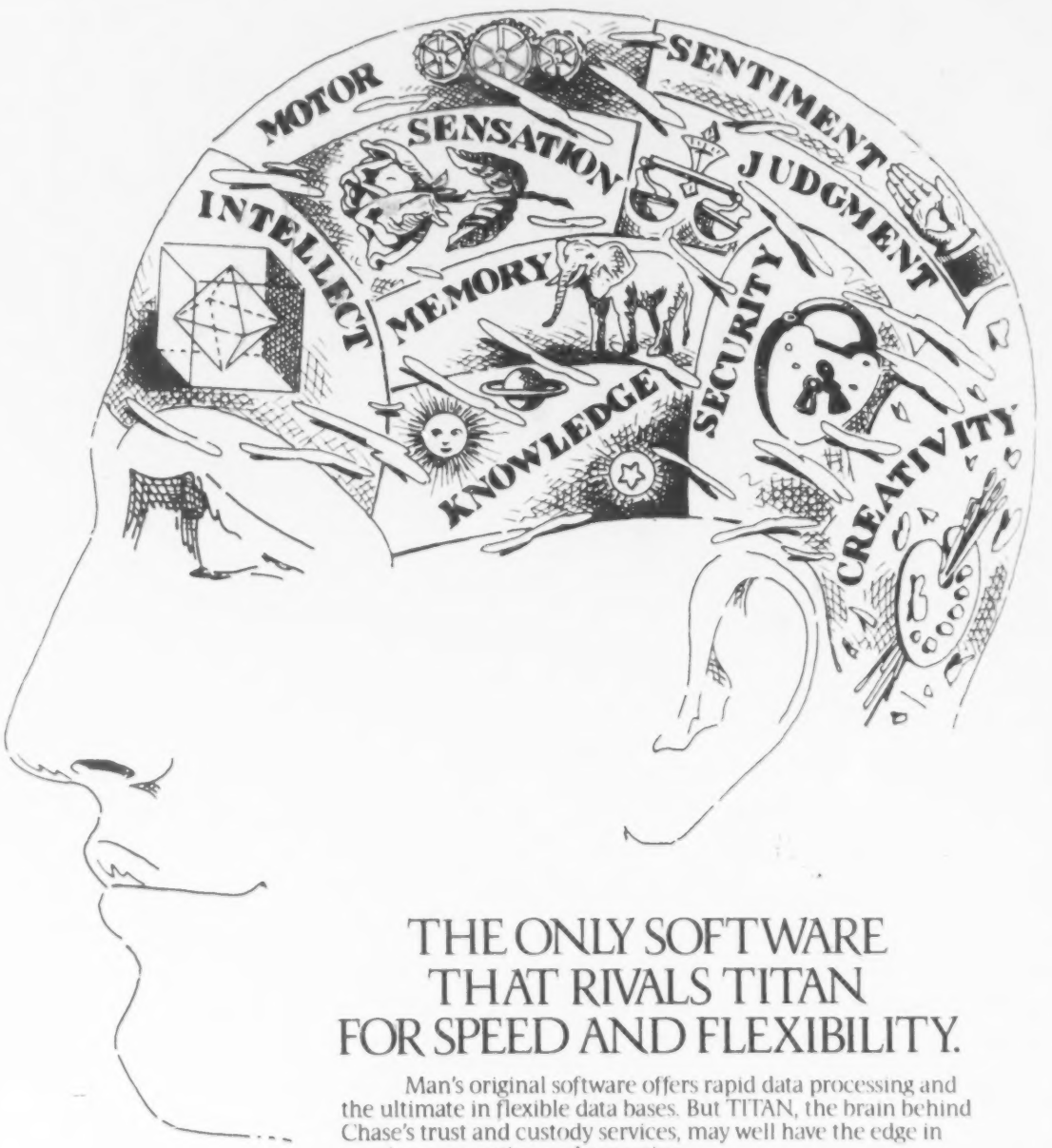
33 North Ave., Suite 900, Atlanta, Ga. 30302; (404) 897-4905

| | |
|---|---|
| Domestic master trust | $4,500,000,000 |
| Domestic master custodial | $9,500,000,000 |
| Global custody | $100,000,000 |
| Domestic master trust clients | 47 |
| Domestic master custodial clients | 96 |
| Global custody clients | 3 |
| Account supervisors | 12 |

Citizen and Southern Trust Co.'s domestic master trust assets increased by $2.8 billion in the year ended June 30; domestic master custodial assets rose $1.2 billion; and global custody assets rose $50 million.

The primary accounting method is trade date accrual. Settlement date non-accrual is offered.

Services offered in the basic master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CHASE

trust/master custodial agreement are financial accounting, transaction settlement and securities custody.

Services available for additional fees are portfolio evaluation participant record keeping, ERISA disclosure, investment management and benefit disbursement.

Monthly transaction reports are available in five days; asset and liability reports, in 10 days; and performance measurement reports, in 15 days. All reports are available on-line.

Fees for domestic services are based on a percentage of assets plus transaction fees; fees for global services are based on a percentage of assets.

Countries covered by the global custody services are the United Kingdom, France, West Germany, the Netherlands, Spain, Sweden, Switzerland, Australia, Hong Kong, Japan and Singapore.

The client contact is J. Dan Davis.

Consultants: Oct. 17.

## Continental Illinois National Bank

30 N. LaSalle St., Chicago, Ill. 60697; (312) 828-3560

| | |
|---|---|
| Domestic master trust | $10,658,000,000 |
| Domestic master custodial | $4,277,000,000 |
| Global custody | $1,500,000,000 |
| Domestic master trust clients | 42 |
| Domestic master custodial clients | 11 |
| Global custody clients | 22 |
| Account supervisors | 21 |

Continental Illinois National Bank's domestic master trust assets rose $467 million in the year ended June 30; domestic master custodial assets increased $149 million; and global custody assets grew by $100 million.

The primary accounting method is trade date full accrual. Settlement date is offered.

Services offered in the basic master trust/master custodial agreement are asset custody, trade execution, accounting and reporting, plan accounting, pensioner payments and nightly cash sweep.

Services available for additional fees are securities lending, performance measurement, global custody and investment management.

Monthly transaction reports are available in two business days; asset and liability reports, in six business days; and performance measurement reports, in 25 days. Transaction reports, asset and liability reports and pensioner history reports are available on-line.

Fees for domestic and global services are based on market value of assets and transactions.

Global custody services are offered in 23 countries.

The master trust client contact is Christopher S. Ross; the global custody client contact is Cheryl Derezinski.

## First Interstate Bank

707 Wilshire Blvd., Los Angeles, Calif. 90017; (213) 612-3062

| | |
|---|---|
| Domestic master trust | $3,871,000,000 |
| Domestic master custodial | $6,475,000,000 |
| Global custody | $24,000,000 |
| Domestic master trust clients | 8 |
| Domestic master custodial clients | 9 |
| Global custody clients | 2 |
| Account supervisors | 9 |

First Interstate Bank's domestic master trust assets rose $3.6 billion in the year ended June 30.

The primary accounting method is contractual settlement. Trade date is offered.

Services offered in the basic master trust/master custodial agreement are benefit disbursement, index funds and ERISA disclosure.

Services available for additional fees are securities lending and performance measurement.

Monthly transaction reports are available in two business days; asset and liability reports, in five business days; and performance measurement reports, in 30 days. Monthly transaction and asset and liability reports are available on-line.

Fees for domestic services are basis points based on market value plus transaction fees.

The master trust client contact is Al Antignolo.

## First Pennsylvania Bank

15th and Market Streets, Philadelphia, Pa. 19101; (215) 786-7946

| | |
|---|---|
| Domestic master trust | $3,918,000,000 |
| Domestic master custodial | $28,598,000,000 |
| Global custody | $300,000,000 |
| Domestic master trust clients | 20 |
| Domestic master custodial clients | 23 |
| Global custody clients | 3 |
| Account supervisors | 16 |

First Pennsylvania Bank's domestic master trust assets rose $144 million in the year ended June 30; domestic master custodial assets rose $1.392 billion; and global custody assets rose $300 million.

The primary accounting method is cash basis. Accrual basis accounting is offered.

Services offered in the basic master trust/master custodial agreement are cash basis reporting, securities movement and control, income collection and client terminal.

Services available for additional fees are performance comparison, performance measurement, accrual accounting, participant record keeping, pension payroll, cash management, securities lending, global custody, portfolio analytics, fail float, downloading and report writer.

Monthly transaction reports are available in five to seven business days; asset and liability reports, in five to seven business days; and performance measurement reports, in 10 to 15 business days. Asset and liability, daily transaction, cash projection and performance measurement reports are available on-line.

Fees for domestic services are based on market value, security, transaction volume and number of accounts using specific individual services. Fees for global services are calculated on a variable basis point scale for portfolio accounting and custody, and on a variable transaction charge by country group.

Countries covered by the global custody services are Japan, Austria, Canada, West Germany, Australia, Belgium, the Netherlands, New Zealand, Switzerland, Hong Kong, Singapore, Denmark, Finland, France, Italy, Malaysia, Norway, Thailand, the United Kingdom, Mexico, Spain and Sweden.

The client contact is James F. McHale, senior vice president.

## First RepublicBank Dallas (NCNB Texas National Bank)

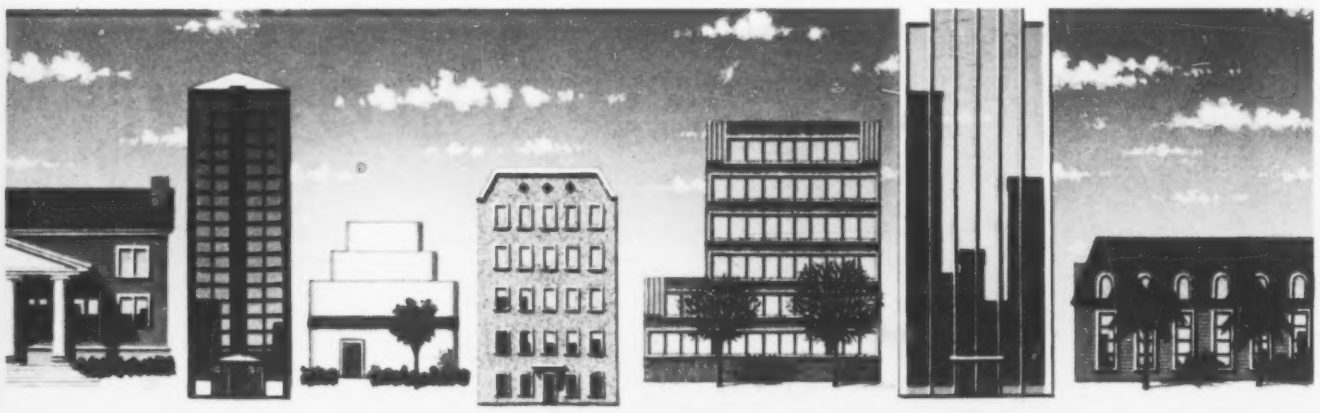
P.O. Box 83500, Dallas, Texas 75283-3500; (214) 922-6506

| | |
|---|---|
| Domestic master trust | $23,900,000,000 |
| Domestic master custodial | $12,200,000,000 |
| Global custody | $510,000,000 |
| Domestic master trust clients | 189 |
| Domestic master custodial clients | 61 |
| Global custody clients | 6 |
| Account supervisors | 17 |

First RepublicBank Dallas' global custody assets rose $110 million in the year ended June 30. (Because of the June 30 deadline, this profile reflects only data of First RepublicBank Dallas. Other than the new name, no other changes stemming from the bank's bailout by NCNB Corp. are shown here.)

The primary accounting method is trade date (full accrual). Settlement date, cash or accrual basis accounting also are offered.

Services offered in the basic master trust/master custodial agreement are client on-line reporting and downloading, on-line DTC securities processing, on-line cash management and forecasting, fail float earnings, 150 accounting reports, global custody, plan accounting and reporting, pre-crediting dividends and interest on payable date in good funds, daily pricing, on-line benefit payments and control disbursement, securities lending, options and futures processing, on-line performance measurement and analytics, TUCS, asset allocation and simulation services, on-line investment manager affirmation, on-line cash management sweep services and on-line

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Our service is built around one simple premise: package services based on customers' needs. Not ours. And we never lose sight of that objective.

We start with an extensive service offering. We build in the flexibility that lets your company select only what you need. Then we add an Account Manager, who's backed by the most sophisticated technology and innovative thinking in the field.

The outcome is a personalized program that meets your company's needs today, and can change to meet them in the future.

Our years of experience have made us a leader in the field. So if your company is ready to put the most advanced Master Trust service to work, call Jane Fisher at (919) 770-6348.

FIRST WACHOVIA

In addition to the Standard Master Trust services, we will custom design services to meet your individual needs. • Securities Lending • Global Custody • Performance Analytics • Trust Universe Comparison Service® * • Options/Futures Administration • Plan Sponsor On-line • Client Seminars • Investment Consulting • Participant Recordkeeping • 401(k) Administration • Real Estate Management • Venture Capital Management • PAYSOP Administration • Legal Administration • Timberland • Flexible Reporting • Fixed Income Management

*Registered trademark of Wilshire Assoc.

institutional custody service.

Services available for additional fees are 401(k) and ESOP administration, government reporting, index funds, portfolio risk insurance, GIC wholesale service, dedicated bond portfolio, performance consulting, transition manager service, futures and options, international, real estate and energy investing.

Monthly transaction reports are available in two business days; asset and liability reports, in three to five business days; and performance measurement reports, in 10 business days. Assets, transactions, cash management and forecasting, performance measurement and benefit payments reports are available on-line.

Fees for domestic services are based on percentage of market value and transaction fees; fees for global services are based on percentage of market value.

Countries covered by the global custody services are Argentina, Australia, Belgium, Canada, Chile, Denmark, Finland, France, West Germany, Hong Kong, Ireland, Italy, Japan, Jordan, Luxembourg, Malaysia, Mexico, the Netherlands, New Zealand, Norway, the Philippines, Portugal, Singapore, South Africa, Spain, Sweden, Switzerland, Thailand and the United Kingdom.

The client contact is David J. Pittman.

### First Trust

180 E. Fifth St., St. Paul, Minn. 55101; (612) 223-7679

| | |
|---|---|
| Domestic master trust | $1,341,000,000 |
| Domestic master custodial | $1,633,000,000 |
| Global custody | $10,000,000 |
| Domestic master trust clients | 17 |
| Domestic master custodial clients | 8 |
| Global custody clients | 2 |
| Account supervisors | 6 |

First Trust's primary accounting method is trade date/full income accrual. Settlement date is available.

Services offered in the basic master trust/master custodial agreement are comprehensive reporting, including investment manager reports, plan reports, ERISA reports and investment performance statements; securities lending; domestic and international custody, including securities clearance and settlement; benefit payment services; automatic cash management; equity index fund; participant record keeping for defined contribution plans; and collective investment funds.

Monthly transaction reports are available in 10 days; asset and liability reports, in 10 days; and performance measurement reports, in 15 days. All are available on-line.

Fees for domestic and global services are based on a percentage of assets plus charges for transactions.

Countries covered by the global custody services are Australia, Canada, Finland, West Germany, Hong Kong, Japan, the Netherlands, the United Kingdom, New Zealand and Cedel and Euroclear depositories. The firm expects to add Denmark, France, Italy, Mexico, Norway, Singapore, Spain, Sweden and Switzerland by Sept. 1.

The client contact is David F. Bodine, vice president.

### First Wachovia

301 N. Main St., Winston-Salem, N.C. 27150; (919) 770-6348

| | |
|---|---|
| Domestic master trust | $23,100,000,000 |
| Domestic master custodial | $5,556,000,000 |
| Global custody | $1,570,000,000 |
| Domestic master trust clients | 63 |
| Domestic master custodial clients | 28 |
| Global custody clients | 13 |
| Account supervisors | 26 |

First Wachovia's domestic master trust assets rose $2.072 billion in the year ended June 30; domestic master custodial assets rose $360 million; and global custody assets increased $832 million.

The primary accounting method is full accrual trade date adjusted. Settlement date accounting also is offered.

Services offered in the basic master trust/master custodial agreement are custody of assets, benefit payments, ERISA reporting, cash management, fail float analysis, monthly reporting, plan accounting, on-line inquiry, legal administrative guidance, administration and daily pricing.

Services available for additional fees are securities lending, global custody, asset allocation, options and futures processing, participant record keeping, performance measurement, portfolio analysis and comparative performance, customized reporting, trade execution reporting, equity index fund, GIC fund, charitable unitized accounting, private foundation accounting and tax preparation, and deferred gift administration.

Monthly transaction reports are available in five business days; asset and liability reports, in 10 business days; and performance measurement reports, in 15 business days. All reports are available on-line.

Fees for domestic services are based on a combination of market value and specific services provided; fees for global services are based on market value and transaction charge.

Countries covered by the global custody services are Argentina, Australia, Austria, Belgium, Brazil, Canada, Chile, Denmark, Finland, France, West Germany, Greece, the Netherlands, Hong Kong, India, Indonesia, Ireland, Italy, Japan, Jordan, Korea, Luxembourg, Malaysia, Mexico, New Zealand, Norway, the Philippines, Portugal, Singapore, Spain, Sweden, Switzerland, Taiwan, Thailand, Turkey, the United Kingdom and Uruguay.

Jane B. Fisher is client contact.

### First Wisconsin Trust Co.

P.O. Box 2054, Milwaukee, Wis. 53201; (414) 765-4444

| | |
|---|---|
| Domestic master trust | $2,916,000,000 |
| Domestic master custodial | $1,510,000,000 |
| Domestic master trust clients | 22 |
| Domestic master custodial clients | 4 |
| Account supervisors | 8 |

First Wisconsin Trust Co.'s domestic master custodial assets rose $51 million in the year ended June 30.

The primary accounting method is fully accrued trade date adjusted.

Services offered in the basic master trust/master custodial agreement are plan accounting (dollar and unitized), care and custody of assets, transaction processing, cash management, consolidated and individual investment reviews, securities lending and absolute performance measurement.

Services available for additional fees are on-line access, relative performance measurement, benefit payments and participant record keeping.

Monthly transaction reports are available in two to three business days; asset and liability reports, in seven to eight business days; and performance measurement reports, in 10 to 12 business days. Monthly transaction reports, pending transactions, consolidated reports and liability reports are available on-line.

Fees for domestic services are based on market value and individual services provided.

The client contact is Robert Fuller.

The real estate directory will be published Sept. 19.

### Guaranty Trust Co. of Canada

335 Bay St., 11th Floor, Toronto, Ontario M5H 3N8; (416) 975-4966

| | |
|---|---|
| Domestic master trust* | $1,221,000,000 |
| Domestic master trust clients | 30 |
| Account supervisors | 3 |

*data in U.S. dollars

Guaranty Trust Co. of Canada's domestic master trust uses settlement date as its primary accounting method. Trade date reporting is offered.

Services offered in the basic master trust/master custodial agreement are income accruals, unitized accounting and consolidated reporting, cash management, portfolio analysis, performance measurement, report customization, legal administrative guidance, benefit disbursement, participant record keeping, securities lending, investment management consulting and options and futures processing.

Monthly transaction reports are available on the fifth business day; asset and liability reports, on the 10th

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The Bear Stearns Companies Inc., 245 Park Avenue, New York, New York 10167.

business day. Daily transaction summary, liquid asset reports, outstanding pending items, list of assets, schedule of maturing assets and anticipated cash balance reports are available on-line.

Fees are based on the average book value and number of plans.

The client contact is Doug Wannamaker, vice president-corporate services.

### Harris Trust and Savings Bank

111 W. Monroe St., Chicago, Ill. 60603; (312) 461-7625

| | |
|---|---|
| Domestic master trust | $39,437,000,000 |
| Domestic master custodial | $1,170,000,000 |
| Global custody | $1,800,000,000 |
| Domestic master trust clients | 68 |
| Domestic master custodial clients | 5 |
| Global custody clients | 13 |
| Account supervisors | 13 |

Harris Trust and Savings Bank's domestic master trust assets rose $3.837 billion in the year ended June 30; domestic master custodial assets increased $81 million; and global custody assets rose $300 million.

The primary accounting method is accrual/trade date. Cash/settlement date also is offered.

Services offered in the basic master trust/master custodial agreement are custody, safekeeping, securities clearance, income collection, cash management, accounting and reporting, and global custody.

Services available for additional fees are benefit disbursement, securities lending, performance measurement, universe comparison, portfolio analysis and consulting, participant record keeping, on-line access, custom cash management, custom reporting and systematic investment management.

Monthly transaction reports are available in two to three business days; asset and liability reports, in three to seven business days; and performance measurement reports, in 10 to 15 business days. Asset, transaction, short-term investment position, broker commission, cusip number/ticker, hi/low, market change and performance measurement reports are available on-line.

Fees for domestic services are based on market value, transactions and individual services required; fees for global services are based on asset value, number of transactions and country.

Countries covered by the global custody services are Argentina, Australia, Austria, Belgium, Brazil, Canada, Denmark, Finland, France, West Germany, Hong Kong, Ireland, Italy, Japan, Luxembourg, Malaysia, Mexico, the Netherlands, Norway, the Philippines, Singapore, Spain, Sweden, Switzerland, the United Kingdom and Venezuela.

The client contacts are Walter J. Kowalczyk and Richard L. Deeter.

### The International Trust Co.

P.O. Box 75, Royal Bank, Toronto, Ontario M5J 2J2; (416) 865-0515

| | |
|---|---|
| Domestic master trust* | $2,560,000,000 |
| Global custody | $8,000,000 |
| Domestic master trust clients | 20 |
| Global custody clients | 1 |
| Account supervisors | 6 |

*data in U.S. dollars

The International Trust Co.'s primary accounting method is settlement date. Trade date is offered.

Services offered in the basic master trust/master custodial agreement are trustee, custodial, income collection, valuations, settlement trades and accounting.

Services available for additional fees are securities lending, STIF, pooled funds, benefit payments and participant record keeping.

Monthly transaction reports are available in 10 days; asset and liability reports, in 10 days; and performance measurement reports, in 20 days. All are available on-line.

Fees for domestic services are based on book value, number of transactions and account structure. Fees for global services are based on market value and transaction volume.

All major countries are covered by the global custody services.

The client contact is William A. Pascoe.

### Irving Trust Co.

1 Wall St., New York, N.Y. 10015; (212) 635-1720

| | |
|---|---|
| Domestic master trust | $16,500,000,000 |
| Domestic master custodial | $40,200,000,000 |
| Global custody | $4,500,000,000 |
| Domestic master trust clients | 35 |
| Domestic master custodial clients | 44 |
| Global custody clients | 65 |
| Account supervisors | 53 |

Irving Trust Co.'s domestic master trust assets rose $1 billion in the year ended June 30; domestic master custody assets increased $3.2 billion.

The primary accounting method is fully accrued, trade date. Settlement date is offered.

Services offered in the basic master trust/master custodial agreement are transaction settlement, asset custody and servicing, reporting, zero balance sweep into STIF funds, on-line trade communications and reporting.

Services available for additional fees are performance analytics and consulting services, securities lending, specialized short-term investment funds, index funds and other investment management services.

Monthly transaction reports are available in five days; asset and liability reports, in five days; and performance measurement reports, in five days. All reports are available on-line.

Fees are calculated based on transactions and market value.

Countries covered by the global custody services are Australia, Belgium, Canada, Denmark, Finland, France, West Germany, Hong Kong, Italy, Japan, Luxembourg, Malaysia, the Netherlands, New Zealand, Norway, Singapore, South Africa, Spain, Sweden, Switzerland and the United Kingdom.

The master trust client contact is P.L. McNamara, vice president; the global custody client contact is Robert Almanas, vice president.

### Manufacturers Hanover Trust

450 W. 33rd St., New York, N.Y. 10001; (212) 613-7900

| | |
|---|---|
| Domestic master trust | $24,000,000,000 |
| Domestic master custodial | $11,796,000,000 |
| Domestic master trust | 109 |
| Domestic master custodial clients | 39 |
| Account supervisors | 22 |

Manufacturers Hanover Trust's domestic master trust assets rose $3 billion in the year ended June 30 and domestic master custodial assets increased $3.128 billion.

The primary accounting method is trade date. Settlement or contractual settlement and full accrual accounting are offered.

Services offered in the basic master trust/master custodial agreement are safekeeping/custody, administration, zero balance, cash management, corporate action monitoring, compliance, ERISA reporting, on-line access, options/futures reporting, fail float protection and full financial reporting, including composite, manager, plan, customized and performance reports.

Services available for additional fees are performance measurement, benefit payments, securities lending, customized reporting, asset allocation, liability planning, comparative universes, TUCs and guarantor trusts.

Monthly transaction reports are available in two to three days; asset and liability reports, in five to seven days; and performance measurement reports, in eight to 10 days. All are available on-line.

MHT/London serves as custodian for $30 billion in global assets. It has correspondent banks in Australia, Belgium, Canada, Denmark, France, West Germany, Hong Kong, Italy, Japan, Luxembourg, Malaysia, the Netherlands, Norway, the Philippines, Singapore, South Africa, Spain, Sweden, Switzerland and the United Kingdom.

Fees for domestic services are based on asset value and individual services; global services fees are based on asset value, transactions and individual services.

The master trust client contact is Renee San Marco, vice president; the global custody client contact is Andrea Brett, vice president.

### Manufacturers National Bank of Detroit

100 Renaissance Center, Detroit, Mich. 48243; (313) 222-4470

| | |
|---|---|
| Domestic master trust | $14,800,000,000 |
| Domestic master custodial | $8,700,000,000 |
| Domestic master trust clients | 12 |
| Domestic master custodial clients | 24 |

Manufacturers National Bank of Detroit's domestic master trust assets rose $1.79 billion in the year ended June 30; domestic master custodial assets rose $4.47 billion.

The primary accounting method is settlement date accounting and trade date accruals.

Services offered in the basic master trust/master custodial agreement are monthly remittances of accumulated income, monthly cash/asset statements, accrual summary accounting and complete custodial services.

Services available for additional fees are cash management, performance measurement, securities lending, benefit payments and participant record keeping.

Monthly transaction reports are available in five business days; asset and liability reports, in five business days; and performance measurement reports, in four weeks.

Transaction reports listing assets, cash projections, available cash, tax lots for an asset, market value of assets and pending trade reports are available on-line.

The client contact is James Sullivan.

### Marine Midland Bank

250 Park Ave., New York, N.Y. 10177; (212) 503-2711

| | |
|---|---|
| Domestic master trust | $1,500,000,000 |
| Domestic master custodial | $1,200,000,000 |
| Domestic master trust clients | 29 |
| Domestic master custodial clients | 44 |
| Account supervisors | 10 |

Marine Midland Bank's domestic master custodial assets rose $600 million in the year ended June 30.

The primary accounting method is full accrual, trade date. Cash, modified cash and tax lot methods are offered.

Services offered in the basic master trust/master custodial agreement are trusteeship, safekeeping, income collection, effecting corporate actions, accounting reports, cash management and ERISA disclosure assistance.

Services available for additional fees are participant record keeping, performance measurement, portfolio analy-

## U.S. master trust/master custody banks*
### ($ millions)

| | Total | Master trust | Master custody |
|---|---|---|---|
| 1. State Street Bank and Trust | 190,235 | 90,834 | 99,401 |
| 2. Bankers Trust | 171,000 | 135,500 | 35,500 |
| 3. Chase Manhattan Bank | 148,200 | 63,200 | 85,000 |
| 4. Northern Trust | 139,000 | 104,111 | 34,889 |
| 5. Boston Safe Deposit & Trust | 114,619 | 38,623 | 75,996 |
| 6. Mellon Bank | 104,624 | 92,054 | 12,570 |
| 7. Citibank | 102,961 | 28,247 | 74,714 |
| 8. Bank of New York | 97,784 | 43,684 | 54,100 |
| 9. Irving Trust | 56,700 | 16,500 | 40,200 |
| 10. Security Pacific | 55,200 | 4,200 | 51,000 |
| 11. Harris Trust | 40,607 | 39,437 | 1,170 |
| 12. First RepublicBank Dallas | 36,100 | 23,900 | 12,200 |
| 13. Manufacturers Hanover Trust | 35,796 | 24,000 | 11,796 |
| 14. First Pennsylvania Bank | 32,516 | 3,918 | 28,598 |
| 15. Nat'l Bank/Detroit | 28,700 | 23,275 | 5,425 |
| 16. First Wachovia | 28,656 | 23,100 | 5,556 |
| 17. Manufacturers Nat'l/Detroit | 23,500 | 14,800 | 8,700 |
| 18. United States Trust** | 17,200 | 12,600 | 4,600 |
| 19. Continental Illinois | 14,935 | 10,658 | 4,277 |
| 20. Ameritrust | 14,179 | 3,716 | 10,463 |
| 21. Citizens & Southern Trust | 14,000 | 4,500 | 9,500 |
| 22. Wilmington Trust | 12,941 | 12,675 | 266 |
| 23. Norwest Bank Minnesota | 11,500 | 3,500 | 8,000 |
| 24. First Interstate Bank | 10,346 | 3,871 | 6,475 |
| 25. Centerre Trust | 6,213 | 1,632 | 4,581 |
| 26. Mercantile-Safe Deposit | 5,100 | 2,800 | 2,300 |
| 27. First Wisconsin Trust | 4,426 | 2,916 | 1,510 |
| 28. Marshall & Ilsley Trust | 3,170 | 1,400 | 1,770 |
| 29. First Trust | 2,974 | 1,341 | 1,633 |
| 30. Marine Midland Bank | 2,700 | 1,500 | 1,200 |
| TOTAL | 1,525,882 | 832,492 | 693,390 |

*Only banks with $2 billion or more
**As of Dec. 31, 1987

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sis and review, securities lending, benefit disbursement, on-line access, plan accounting, options and futures processing and investment management.

Monthly transaction reports are available in five days; asset and liability reports, in five days; and performance measurement reports, in 15 days.

Fees are based on a percentage of total asset value, transaction costs and charges for individual services required.

The client contact is Lawrence T. McGowan, vice president.

### Marshall & Ilsley Trust Co.

770 N. Water St., Milwaukee, Wis. 53202; (414) 287-7187

| | |
|---|---|
| Domestic master trust | $1,400,000,000 |
| Domestic master custodial | $1,770,000,000 |
| Global custody | $8,000,000 |
| Domestic master trust clients | 46 |
| Domestic master custodial clients | 7 |
| Global custody clients | 2 |
| Account supervisors | 9 |

Marshall & Ilsley Trust Co.'s global custody assets increased $8 million in the year ended June 30.

The primary accounting method is accrual.

Services offered in the basic master trust/master custodial agreement are performance measurement, participant record keeping, ERISA disclosure, benefit disbursement and investment management.

Services available for additional fees are on-line access to trust account, participant record keeping and pension benefit information, and data downloading.

Monthly transaction reports and performance measurement reports are available in five to seven business days. Asset and liability and transaction reports are available on-line.

Fees for domestic services are based on asset value and individual services; fees for global services are based on asset value plus transactions.

All major foreign securities markets are covered by the global custody services.

The client contact is Morry L. Birnbaum.

### Mellon Bank

1 Mellon Bank Center, Pittsburgh, Pa. 15258; (412) 234-5000

| | |
|---|---|
| Domestic master trust | $92,054,000,000 |
| Domestic master custodial | $12,570,000,000 |
| Global custody | $1,900,000,000 |
| Domestic master trust clients | 108 |
| Domestic master custodial clients | 16 |
| Global custody clients | 33 |
| Account supervisors | 21 |

Mellon Bank's domestic master trust assets rose $5.857 billion in the year ended June 30; domestic master custodial assets rose $660 million; and global custody assets rose $300 million.

The primary accounting method is trade date fully accrued. Cash accounting is offered.

Services offered in the basic master trust/master custodial agreement are conversion, administration, automated cash sweep, cash management, accounting and reporting.

Services available for additional fees are securities lending, global custody, participant record keeping, pension disbursement, performance measurement, option, futures and on-line services.

Monthly transaction reports are available in three days; asset and liability reports, in three to five days; and performance measurement reports, in three to five weeks. All are available on-line.

Fees for domestic services are based on a combination of asset value, individual services and account activity; global services fees are based on account base charge, asset value charge and transaction charge.

Countries covered by the global custody services are Argentina, Australia, Austria, Belgium, Brazil, Canada, Denmark, Ecuador, Finland, France, West Germany, Hong Kong, Ireland, Italy, Japan, Luxembourg, Malaysia, Mexico, the Netherlands, New Zealand, Norway, Peru, Portugal, Singapore, South Africa, Spain, Sweden, Switzerland, the United Kingdom, Uruguay and Venezuela.

The client contact is Gary A. Rothman.

**Canadian master trust banks**

| | U.S. $ mils. |
|---|---|
| Royal Trust/Canada | 17,843 |
| National Trust | 6,800 |
| Montreal Trust/Canada* | 6,200 |
| International Trust | 2,560 |
| Guaranty Trust/Canada | 1,321 |
| TOTAL | 34,724 |

*As of March 31, 1988

### Mercantile-Safe Deposit & Trust Co.

2 Hopkins Plaza, Baltimore, Md. 21201; (301) 237-55[illegible]

| | |
|---|---|
| Domestic master trust | $2,800,000,000 |
| Domestic master custodial | $2,300,000,000 |
| Global custody | $88,000,000 |
| Domestic master trust clients | 28 |
| Domestic master custodial clients | 3 |
| Global custody clients | 2 |
| Account supervisors | 9 |

Mercantile-Safe Deposit & Trust Co.'s primary accounting method is theoretical settlement date with accrual accounting.

Services offered in the basic master trust/master custodial agreement are ERISA reporting, benefit payments, cash management and option transactions.

Services available for additional fees are participant record keeping and foreign custody.

Fees for domestic services are based on principal and income; fees for global services are based on total market value.

Countries covered by the global custody services are Australia, Bahamas, Belgium, Brazil, Canada, Channel Islands, Denmark, France, West Germany, Greece, Hong Kong, Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, Norway, the Philippines, Singapore, South Africa, Spain, Sweden and Switzerland.

The master trust client contact is Alton A. Shoda; the global custody client contact is James H. Clark.

### Montreal Trust Co. of Canada

15 King St. W., Toronto, Ontario M5H 1B4; (416) 860-5555

| | |
|---|---|
| Domestic master trust* | $6,200,000,000 |
| Global custody | $122,000,000 |
| Domestic master trust clients | 87 |
| Global custody clients | 10 |
| Account supervisors | 14 |

*data in U.S. dollars as of March 31

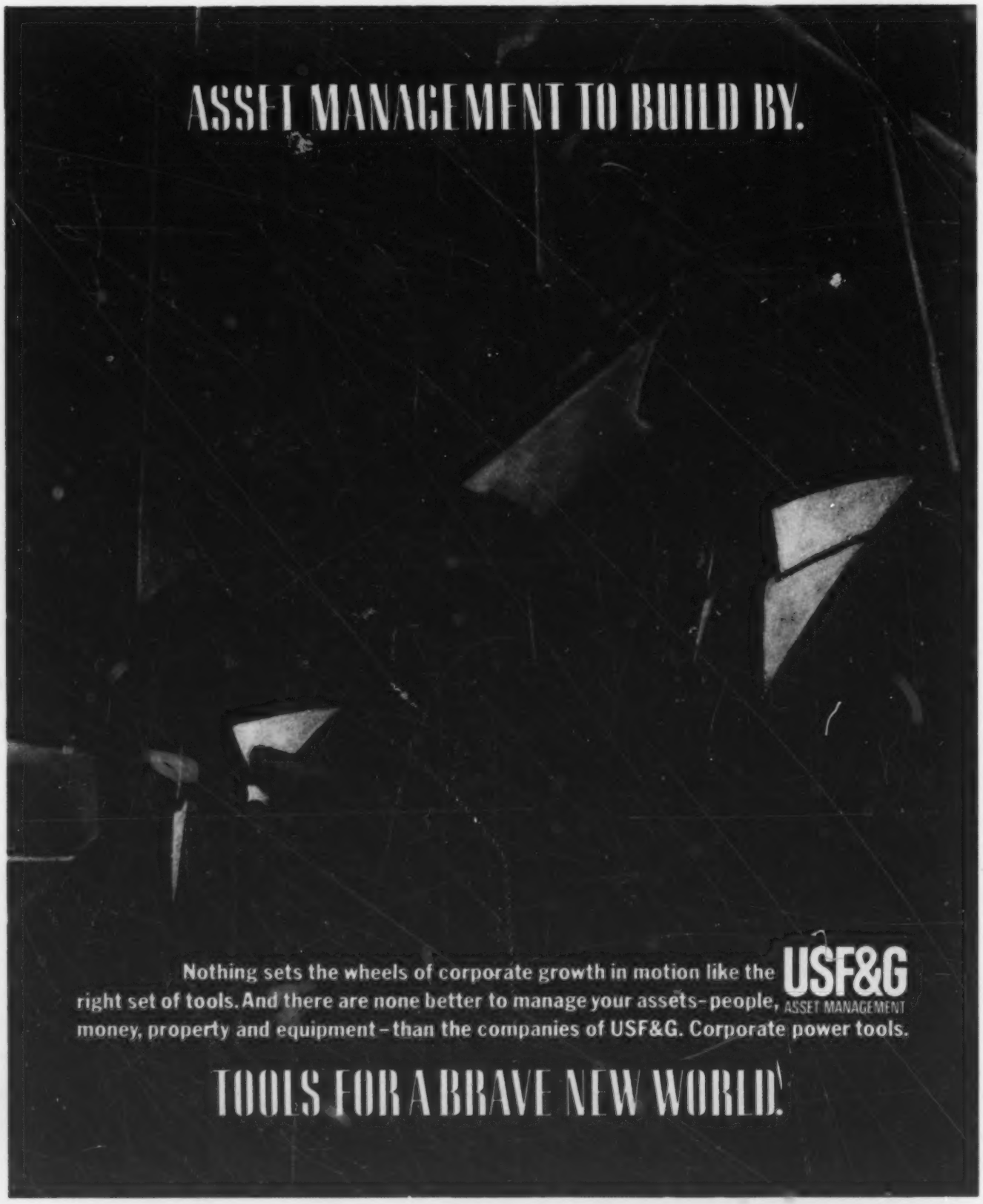
Montreal Trust Co. of Canada uses settlement date accounting as its primary accounting method.

Services offered in the basic master trust/master custodial agreement are corporate trusteeship for consolidated pension funds, consolidated accounting, government reporting, automated crediting and allocation of dividends and interest, trust documentation, benefit payments, securities lending, global custody, options processing, on-line and microcomputer reporting, index fund and short-term investment fund.

Services available for additional fees are unitization, transaction fees, benefit payments, dial-up systems, customized reports, Department of National Revenue reporting, special work/activities, audit letters, mortgage administration, strip coupon custody and wire transfers.

Monthly transaction reports are available in 10 business days; asset and liability reports, in 10 business days; and performance measurement reports, in 15 business days. Basic accounting and portfolio data are available on-line.

Fees for domestic services are based on the average book value of the fund, while those for global services are based on market value at the end of each month in Canadian dol-



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More than 20 countries are covered by global custody services.

The domestic master trust client contact is Raymond W. La Force; global custody client contact is Arlene M. Matthew.

### National Bank of Detroit

611 Woodward, Detroit, Mich. 48226; (313) 225-2660

| | |
|---|---|
| Domestic master trust | $23,275,000,000 |
| Domestic master custodial | $5,425,000,000 |
| Global custody | $500,000,000 |
| Domestic master trust clients | 142 |
| Domestic master custodial clients | 61 |
| Global custody clients | 20 |
| Account supervisors | 15 |

National Bank of Detroit's domestic master custodial assets increased $2.27 billion in the year ended June 30; global custody assets rose $115 million.

The primary accounting methods used are trade date and settlement date.

Services offered in the basic master trust/master custodial agreement are custody, benefit disbursements, cash management, performance measurement, portfolio review, securities lending, global custody and data monitoring.

Services available for additional fees are participant record keeping and investment management.

Monthly transaction reports and asset and liability reports are available in five to seven business days; performance measurement reports are available in five to 30 business days. All reports are available on-line.

Fees for domestic services are based on asset value and transactional activity; fees for global services are based on securities fees and transactional activity.

All countries are covered by global custody services.

The client contact is Larry D. Rankens, assistant vice president.

Public funds: Nov. 28.

### National Trust Co.

21 King St. E., Toronto, Ontario M5C 1B3; (416) 361-3844

| | |
|---|---|
| Domestic master trust* | $6,800,000,000 |
| Domestic master trust clients | 100 |
| Account supervisors | 15 |

*data in U.S. dollars

National Trust Co.'s primary accounting method is contractual settlement date with a schedule of pending trades.

Services offered in the basic master trust/master custodial agreement are master trust reporting, benefit disbursements, income collection and safekeeping of securities.

Services available for additional fees are performance measurement, securities lending, index fund, STIF, on-line inquiry and data downloading.

Monthly transaction reports are available in five business days; asset and liability reports, in 10 business days; and performance measurement reports, in 12 business days. Monthly statement of accounts and monthly valuation reports are available on-line.

Fees are based on the book value of assets, plus transaction fees.

National Trust's client contact is Paul Lewis, vice president-employee benefit services.

### The Northern Trust Co.

50 S. LaSalle St., Chicago, Ill. 60675; (312) 630-6000

| | |
|---|---|
| Domestic master trust | $104,111,000,000 |
| Domestic master custodial | $34,889,000,000 |
| Global custody | $4,300,000,000 |
| Domestic master trust clients | 216 |
| Domestic master custodial clients | 45 |
| Global custody clients | 56 |
| Account supervisors | 47 |

The Northern Trust Co.'s domestic master trust assets rose $22.154 billion in the year ended June 30; and domestic master custodial assets increased $7.704 billion.

The primary accounting method is settlement date, fully accrued. Trade date reporting is offered.

Services offered in the basic master trust/master custodial agreement are administration, custody of assets, trade settlement, income collection, daily pricing, coding, capital structures changes, automated tax-lot accounting, investment reports and automated cash sweep.

**Overall rating of master trust banks by corporate pension executives**

| Bank | Rating | Number of responses* |
|---|---|---|
| Mellon Bank | 5 | 6 |
| Nat'l Bank/Detroit | 4 | 4 |
| Harris Trust | 4 | 5 |
| State Street Bank | 4 | 9 |
| Bankers Trust | 4 | 16 |
| Bank of New York | 4 | 3 |
| Northern Trust | 4 | 15 |
| Irving Trust | 4 | 3 |
| Boston Safe Deposit | 4 | 4 |
| Citibank | 4 | 4 |
| Chase Manhattan | 4 | 11 |
| First Wachovia | 3 | 3 |

*Does not include banks with fewer than three responses

Services available for additional fees are global custody, electronic delivery system, cash investments, structured investments, traditional investments, performance measurement, securities lending, benefit payments and options and futures accounting.

Monthly transaction reports are available in three business days; asset and liability reports, in five business days; and performance measurement reports, in 19 to 25 days. All reports are available on-line.

Fees for domestic services are based on the number of investment managers, number and types of transactions and market value of assets. Global custody fees consist of a base charge per investment manager portfolio plus a percentage of the market value of the assets.

Thirty countries are covered by global custody services.

The master trust client contact is Thomas W. Kimen, senior vice president; the global custody client contact is Jennifer Kamp Cameron, vice president.

### Norwest Bank Minnesota

6th Street and Marquette, Minneapolis, Minn. 55479; (612) 667-8123

| | |
|---|---|
| Domestic master trust | $3,500,000,000 |
| Domestic master custodial | $8,000,000,000 |
| Global custody | $220,000,000 |
| Domestic master trust clients | 20 |
| Domestic master custodial clients | 450 |
| Global custody clients | 5 |
| Account supervisors | 12 |

Norwest Bank Minnesota's domestic master trust assets rose $111 million in the year ended June 30; domestic master custodial assets increased $215 million; and global custody assets rose $60 million.

The primary accounting method is cash accounting. Share accounting and unit accounting are offered.

Services offered in the basic master trust/master custodial agreement are record keeping, custody, administration, reporting, security control, income collection and asset valuation.

Services available for additional fees are cash management, investment management, performance analysis and securities lending.

Monthly transaction reports, asset and liability reports and performance measurement reports, all are available eight days after the end of a period. Transaction and asset/liability reports are available on-line.

Fees for domestic and global services are based on market value.

Norwest subcontracts global services through Morgan Stanley covering 22 countries.

The master trust client contact is Kerry Noyes; the global custody client contact is John Hanson.

### Royal Trust Corp. of Canada

P.O. Box 7500, Station A, Toronto, Ontario M5W 1P9; (416) 864-6586

| | |
|---|---|
| Domestic master trust assets* | $17,843,000,000 |
| Domestic master trust clients | 150 |
| Account supervisors | 15 |

*data in U.S. dollars


# Is Your Equity Manager's Style A Mystery To You?

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Royal Trust Corp. of Canada's domestic master trust assets rose $957 million in the year ended June 30.

The primary accounting method is settlement date. Full adjustment to trade date in statements is offered.

Services offered in the basic master trust/master custodial agreement are full safe-custody; Canadian, U.S. and overseas settlement and income collection (income anticipated on Canadian and U.S.); corporate changes; automatic credit for maturities redemption; expiry date notification; full financial reporting, including total fund and component return calculations; and full benefit payment services.

Services available for additional fees are performance measurement and analysis; securities lending; on-line entry and inquiry; downloading; asset/liability forecasting; global custody; and domestic and foreign investment management.

Monthly transaction reports are available in three to four days; asset and liability reports, in 10 to 20 days; and performance measurement reports, in seven weeks.

Transactions, assets, trade status, cash forecasting and asset valuations and analysis reports are available on-line.

Fees for domestic services are based on asset value, transactions and report changes; fees for global services are based on asset value.

All countries are covered by global custody services.

The client contact is Richard Holloway, director-pension services.

### Security Pacific

333 S. Grand Ave., Suite 1740, Los Angeles, Calif. 90071; (213) 229-2996

| | |
|---|---|
| Domestic master trust | $4,200,000,000 |
| Domestic master custodial | $51,000,000,000 |
| Global custody | $1,200,000,000 |
| Domestic master trust clients | 17 |
| Domestic master custodial clients | 40 |
| Global custody clients | 8 |
| Account supervisors | 11 |

Security Pacific's domestic master trust assets rose $1 billion in the year ended June 30; domestic master custodial assets rose $16 billion; and global custody assets rose $500 million.

The primary accounting method is trade date, with full accruals. Contractual and cash basis methods are offered.

Services offered in the basic master trust/master custodial agreement are benefit payments, securities lending, performance measurement, on-line inquiry, analytics, global custody, customized reporting, ERISA reporting, PC workstation, unitized accounting and asset liability reports.

Services available for additional fees are performance measurement, benefit payments, portfolio analytics, global clearance and securities lending.

Monthly transaction reports are available in one day; asset and liability reports, in five to seven days; and performance measurement reports, in two to three weeks. Transaction, asset list, trade status, account history, statements, anticipated income and securities lending reports are available on-line.

Fees for domestic and global services are based on market value and activity charges.

Global custody services are offered in 24 countries.

The client contact is Brad Marcus.

### State Street Bank and Trust

P.O. Box 1992, Boston, Mass. 02101; (617) 847-7490

| | |
|---|---|
| Domestic master trust | $90,834,000,000 |
| Domestic master custodial | $99,401,000,000 |
| Global custody | $17,850,000,000 |
| Domestic master trust clients | 158 |
| Domestic master custodial clients | 69 |
| Global custody clients | 107 |
| Account supervisors | 94 |

State Street Bank and Trust Co.'s domestic master trust assets rose $2.166 billion in the year ended June 30; domestic master custodial assets increased $1.701 billion; and global custody assets rose $3.3 billion.

The primary accounting method is true trade date, full accrual.

Services offered in the basic master trust/master custodial agreement are safekeeping, cash management, trade settlement, income collection, corporate action monitoring, cash availability, accounting for real estate, venture capital, options, futures, daily, weekly and monthly valuation, fiduciary control, plan accounting, securities lending and performance measurement.

Services available for additional fees are multicurrency reporting, on-line services, sample, portfolio diagnostics, BARRA model, asset allocation and global performance.

Monthly transaction reports are available in three to seven business days; asset and liability reports, in five to seven business days; and performance measurement reports, in seven to nine business days. All are available on-line.

Fees are based on asset value, portfolio structure and trading values. Optional services are priced according to number of accounts.

Countries covered by the global custody services are Australia, Austria, Belgium, Canada, Denmark, Finland, France, West Germany, Hong Kong, Italy, Japan, Malaysia, Mexico, the Netherlands, New Zealand, Norway, the Philippines, Singapore, Spain, Sweden, Switzerland, Thailand and the United Kingdom.

The client contacts are: John Houlihan, senior vice president, master trust division; J.D. Nelson, senior vice president, public funds division; Gustaff V. Fish, vice president, master custody division; and Frank D. Antin, vice president, North America global custody.

### United States Trust Co.

45 Wall St., New York, N.Y. 10005; (212) 806-4500

| | |
|---|---|
| Domestic master trust* | $12,600,000,000 |
| Domestic master custodial | $4,600,000,000 |
| Global custody | $134,000,000 |
| Domestic master trust clients | 148 |
| Domestic master custodial clients | 91 |
| Global custody clients | 55 |
| Account supervisors | 25 |

*data as of Dec. 31

United States Trust Co.'s domestic master trust assets increased $1.371 billion in the year ended Dec. 31; domestic master custodial assets rose $300 million; and global custody assets grew by $43.55 million.

The primary accounting method is average cost. Other accounting methods offered include low cost, high cost, amortization, accretion, LIFO and FIFO. Reporting can be provided by trade date and settlement date with pending addenda.

Services offered in the basic master trust/master custodial agreement are accounting, reporting, cash management and STIF sweep.

Services available for additional fees are performance measurement, securities lending, investment consulting and global custody.

Monthly transaction reports are available in two to three business days; asset and liability reports, in five to seven business days; and performance measurement reports, in six to eight business days. Transaction, priced asset listings and performance measurement reports are available on-line.

Fees for domestic services are based on transaction volumes and market value; fees for global services are asset and transaction-based, depending on the countries involved.

Countries covered by the global custody services are the United Kingdom, France, Switzerland, Japan, Italy, West Germany, Canada, the Netherlands, Australia, Belgium, Denmark, Finland, Hong Kong, Luxembourg, Mexico, Norway, Philippines, Singapore, South Africa, Spain and Sweden.

The client contact is Joseph D'Addario, vice president.

### Wilmington Trust Co.

Rodney Square North, Wilmington, Del. 19890; (302) 651-1000

| | |
|---|---|
| Domestic master trust | $12,675,000,000 |

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# Custodians

*Continued from page 23*

were down, but also, pension fund sponsors put a lot of decisions on hold about international investments, asset allocation and so forth. There was a wait-and- see attitude that lasted from Oct. 19 to the first quarter when not a lot was happening."

Mr. Golz confirmed that was not the case, however, on the master custody side, as public fund sponsors decided to hire master custodians.

Surpassing State Street in master trust assets this year are Bankers Trust Co., New York, and Northern Trust Co., Chicago. Bankers Trust, whose combined assets of $171 billion make it No. 2 on the chart, has $135.5 billion in master trust assets. Bankers Trust excluded $46 billion in thrift assets in last year's survey, which partly accounts for the increase this year.

Northern Trust has $104.1 billion in master trust assets and combined assets of $139 billion, ranking fourth overall.

Bankers Trust this year usurped Chase Manhattan Bank's position as the second largest provider of master trust/master custodial services, even though its market share declined to 11.6% from 12%.

Chase Manhattan reported combined assets of $148.2 billion, with a market share of 9.7%, up from 8.3% a year ago. Northern Trust's market share increased to 9.1%, up from 8.8%, and it remained the fourth largest provider of master trust/master custodial services.

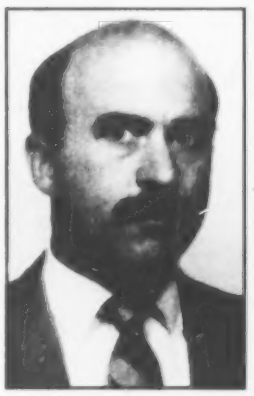
Boston Safe Deposit & Trust Co. reported combined master trust/master custodial assets of $114.6 billion, for a market share of 7.5%. It moved to the No. 5 position, up from No. 8 last year.

Of the remaining five banks in the top 10, Mellon Bank, Pittsburgh, has 6.9% of the market; Citibank, New York, 6.7%; Bank of New York, 6.4%; Irving Trust Co., New York, 3.4%; and Security Pacific, Los Angeles, 3.6%.

Missing from this year's list is Bank of America, San Francisco, which no longer is in the market. In last year's survey, Bank of America reported $16.3 billion in master trust/master custodial assets.

In January, after months of problems with its trust accounting system, BankAmerica Corp. shifted most of its institutional trust business to a subsidiary, Seattle First National Bank. The bank had spent $60 million to improve the malfunctioning MasterNet system, which cost $20 million. ■

Rodger F. Smith, a partner of Greenwich Associates (above), and Mike Wright, a consultant with The Wyatt Co.



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*Continued from page 37*

| | |
|---|---|
| Domestic master custodial | $266,000,000 |
| Global custody | $1,143,000,000 |
| Domestic master trust clients | 10 |
| Domestic master custodial clients | 2 |
| Global custody clients | 67 |
| Account supervisors | 5 |

Wilmington Trust Co.'s domestic master trust assets rose $38 million in the year ended June 30; domestic master custodial assets increased $126 million; and global custody assets rose $7 million.

The primary accounting method is trade date, fully accrued. Contractual settlement date and cash accounting are offered.

Services offered in the basic master trust/master custodial agreement are custody, cash management, master trust reporting and options and futures processing.

Services available for additional fees are investment and analytic services, on-line access, securities lending, global custody, pension disbursement and participant record keeping.

Monthly transaction reports are available in one day; asset and liability reports, in two days; and performance measurement reports, in 14 days. Monthly transaction and asset and liability reports are available on-line.

Fees for domestic and global services are based on asset value and transaction charges.

Countries covered by the global custody services are Austria, Australia, Bahamas, Belgium, Brazil, Canada, Channel Islands, Denmark, France, Finland, West Germany, Greece, Hong Kong, Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, Norway, the Philippines, Singapore, South Africa, Spain, Sweden, Switzerland, Thailand and the United Kingdom.

The client contact is Barbara A. Uberti, assistant vice president.

# California glides to success

## Master custody set-up runs smoothly

By Trudy Ring

SACRAMENTO, Calif. — Setting up the nation's largest master custodial account — for the $46 billion California Public Employees' Retirement System — was a challenging exercise that has paid off.

In January 1987, the California fund selected Boston Safe Deposit & Trust Co., Boston, as its first master custodian after a change in state law allowed the fund to use an outside custodian rather than the state treasurer's office.

When the treasurer had custody of the fund, securities were housed at various locations; the three primary ones were the treasurer's office and two depositories. Pulling everything together required a great deal of work on the part of the new custodian, said Basil Schwan, assistant executive officer in charge of the fund's investment operations.

"It's always easier, of course, if you are dealing with a single predecessor," said Robert Mainer, senior vice president and deputy manager of the institutional markets group at Boston Safe. "We had multiple sources of information (on the securities held by the fund). That made it, admittedly, more challenging than if it had all been in one place."

But the account was up and running by May 1987. Most of the lag time was due to contract negotiations, often a time-consuming process; once those were settled, Boston Safe geared up to service the account.

"We thought their ability to do that quickly was quite amazing," Mr. Schwan said.

"It was quite a challenge for Boston Safe to identify everything and make that conversion" to the new account, he said.

At the peak of the preparation for taking over the account, Boston Safe had 48 people working on it; they were involved in such aspects as transferring information to Boston Safe's computer system, modifying the system as needed and reconciling securities, Mr. Mainer said. Of this group, 16 were on a team dedicated primarily to the project; the others came in as needed.

The effort was almost exclusively Boston Safe's, Mr. Schwan said; the California fund had two staff members working on getting the information to the custodian.

Problems that sometimes crop up when changing custodians — such as mistakenly accounting for securities a fund really doesn't hold, or missing some it does — didn't occur to any significant extent, thanks to Boston Safe's skill, Mr. Schwan said.

Mr. Mainer noted Boston Safe had an elaborate plan and schedule for taking over the account, identifying each necessary step and the person responsible for it, so this kept problems at bay.

Also, he said, the retirement system's money managers were satisfied with the transfer's smoothness — something they don't always find.

After the information was gathered, Boston Safe was well prepared technologically to service the account, Messrs. Schwan and Mainer said.

"The systems impact, despite the size of the account, was moderate," Mr. Mainer said. "Largely, that was a matter of adaptation of existing systems to the particular requirements of California PERS."

Certain customization of the system was involved in setting up computer links among the Boston Safe headquarters, the pension fund office and the California treasurer's and controller's offices.

The fund staff has on-line access to Boston Safe's data on the account, including information on transactions, cash flow and portfolio makeup and analytical material on investment managers' strategies, risks and returns.

This is far from the California fund's previous, manual system of keeping records.

"The currency and the accessibility is mind-boggling," Mr. Schwan said. "We've gone light-years in just one year."

The treasurer's office didn't have such technology, a major factor California fund officials considered in their master custodian search. "We were most interested in somebody who would make a commitment to get us up to speed in a very short time," he said.

**Basil Schwan of the California Public Employees' Retirement System**

Any of the five finalists in the search likely could have done the job, but Boston Safe was rated highest by the fund's staff, Mr. Schwan said. The other finalists were Bank of New York, Bankers Trust Co. and Chase Manhattan Bank, all of New York, and State Street Bank and Trust Co., Boston. "We have not had any regrets" about choosing Boston Safe, he said.

Nor has Boston Safe regretted taking on the account. "It's a stimulating account, because it's great to work with people who are front runners in whatever field they're in," Mr. Mainer said. ■

# Execs content

*Continued from page 23*

three pension executives; 32 had that many responses from money managers.

Mellon Bank, while tops among pension executives, was 11th among trustee banks rated by managers. It had an overall score of 4, with responses from 21 managers.

Harris Trust — which was ranked first by managers in 1986 with a 4.4 rating — was 17th this year with a 3.9 rating. It was rated by 21 managers, up from 18 two years ago. This year's champion, Marshall & Ilsley, was third in 1986, with a 4.3 rating from managers.

Master trust banks rated by the greatest number of managers were Northern Trust, with 30 responses; State Street Bank & Trust Co., Boston, and Bankers Trust, with 28 each; and Chase Manhattan, with 27. ■

**Overall ranking of master trust banks by investment managers**

| | Rating | Number of responses* |
|---|---|---|
| 1. Marshall & Ilsley Trust | 4.5 | 6 |
| 2. Ameritrust | 4.4 | 9 |
| 3. Wilmington Trust | 4.4 | 5 |
| 4. Continental Illinois | 4.3 | 10 |
| 5. Texas Commerce | 4.3 | 7 |
| 6. First City Nat'l/Dallas | 4.25 | 4 |
| 7. Trust Co. Bank | 4.25 | 4 |
| 8. First Trust Co./St. Paul | 4.1 | 10 |
| 9. Northern Trust | 4.1 | 30 |
| 10. First Pennsylvania | 4 | 5 |
| 11. Mellon Bank | 4 | 21 |
| 12. Manufacturers/Detroit | 4 | 5 |
| 13. State Street Bank | 4 | 28 |
| 14. Boston Safe Deposit | 3.95 | 23 |
| 15. Bank of New York | 3.9 | 13 |
| 16. Citibank | 3.9 | 21 |
| 17. Harris Trust | 3.9 | 21 |
| 18. Irving Trust | 3.9 | 18 |
| 19. Security Pacific | 3.9 | 9 |
| 20. Norwest Bank | 3.85 | 7 |
| 21. First Wachovia | 3.75 | 16 |
| 22. Marine Midland Bank | 3.75 | 4 |
| 23. Bankers Trust | 3.6 | 28 |
| 24. Centerre Trust | 3.5 | 10 |
| 25. Citizens & Southern | 3.5 | 4 |
| 26. United States Trust | 3.45 | 11 |
| 27. Chase Manhattan Bank | 3.4 | 27 |
| 28. First Wisconsin Trust | 3.4 | 8 |
| 29. Manufacturers Hanover | 3.4 | 18 |
| 30. Nat'l Bank/Detroit | 3.3 | 13 |
| 31. Mercantile-Safe Deposit | 3.25 | 8 |
| 32. First RepublicBank | 3.1 | 9 |

*Does not include banks with fewer than three responses

# Global

*Continued from page 23*

all service a 4; more than a third rated service a 3.

Fees didn't earn good marks either (*see related story, page 24*).

While only 13% of executives said their domestic master trustee fees were high, 37% of respondents to the global custody survey said their fees were high; 78% said domestic master trust fees were average, compared with 60% who rated global custody fees as average.

Fees might come down as competition heats up. One newcomer, Morgan Stanley Trust Co., already has $1.67 billion in global custody assets.

Irving Trust, now using Mitsubishi for global custody, will launch its own global custody product by the end of the year, according to Robert Almanas, vice president and global custody product manager.

In addition, Barclays Bank PLC, New York, will plug into the existing global custody system at its London headquarters to accommodate U.S. clients by Jan. 1, said Joseph Vierno, vice president-global custody group. ■

# Phoenix Mutual hits $2 billion

HARTFORD, Conn. — The Phoenix Mutual Life Insurance Co. has reached the $2 billion milestone in pension fund assets under management with the addition recently of $88.2 million from three new clients.

H. Russell Irving, vice president-pensions, attributed the 25% annual growth rate to the insurance company's "outstanding investment performance in equities, real estate and guaranteed investment contracts, and to aggressive marketing."

Phoenix Mutual Life, which manages $7.7 billion in assets, has significantly broadened its geographical mix of clients in the past three years. ■

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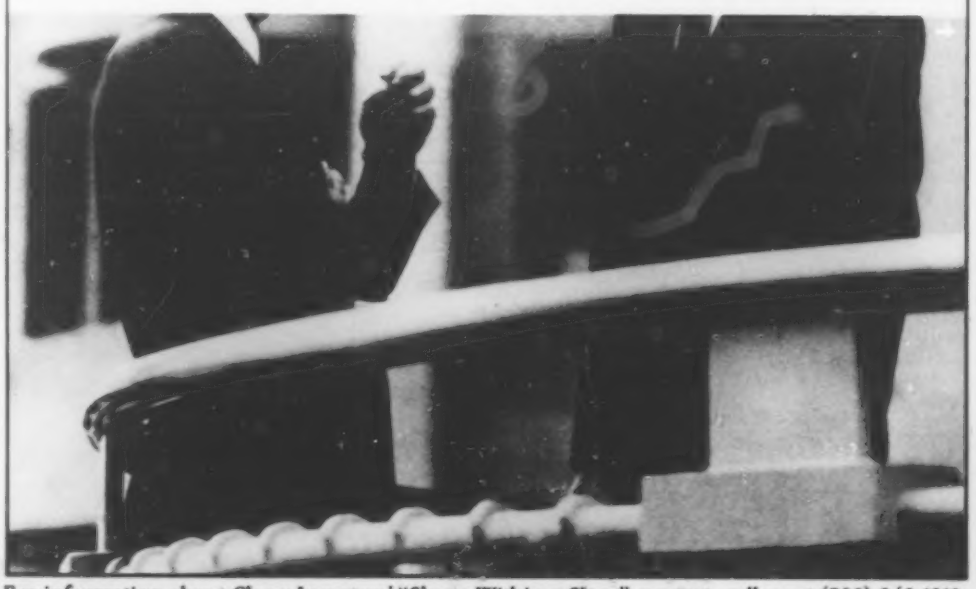

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MASTER TRUST

# 1980s prosperous for Boston Co.

BOSTON — By any objective measure, The Boston Co. Inc. ranks as one of the major success stories of the 1980s in the investment management and trust business.

Since 1982, tax-exempt assets under management have increased to $14.4 billion from $5.3 billion; master trust and master custody assets have increased to $110 billion from $14.6 billion; and the company's own assets have increased to $15.3 billion from $664 million.

Those are impressive growth figures, especially for a company that seemed to have lost its way in the late 1970s when it sold off a number of investment counseling subsidiaries acquired in the early part of the decade.

At the end of 1981, The Boston Co.'s chief subsidiary, Boston Safe Deposit & Trust Co., ranked 963 among trust organizations in terms of assets. It now ranks 20th.

The surge in growth dates from the firm's acquisition in 1981 by Shearson Lehman Brothers Inc., and the appointment in 1982 of James von Germeten as president and chief investment officer.

The company was searching for a new sense of direction in 1982, Mr. von Germeten said in an interview. It set out to identify those market opportunities that offered a lot of potential for growth and that were large enough for a new entrant to make an impact, even if it faced entrenched competition.

"Then we decided to focus our resources on a handful of these opportunities — master trust, mutual funds, quantitative investment management and individual client business — while building the company's balance sheet," he said.

"In every case we were told we were too late to be successful, that there was too much competition already."

The Boston Co. committed a substantial amount of capital and talent to the targeted areas. In the master trust area, for example, investments for system development and enhancement were $1.7 million in 1983, $1.9 million in 1984, $2 million in 1985, $3.9 million in 1986, $5 million in 1987 and an estimated $6.8 million for 1988.

The company's executives realized that to be successful, they would have to invest incrementally in the systems, said Jean C. Tempel, executive vice president and head of the corporate operations group. They knew they could not make an initial investment and then relax. "This is an evolutionary development process. You must keep investing."

One reason the company has been able to grow in its chosen niches, said Robert C. Mainer, senior vice president, is that it has been able to reinvest all of its profits. It has paid none of its earnings to its parent, Shearson Lehman Hutton Inc., since 1981.

According to Mr. von Germeten, this is because the return on equity of the Boston Co. has been so high — 35% to 40% per year — "this is as good a place as the company has to invest money."

The result, said Mr. Mainer, is a company able to invest in systems and hire people ahead of needs.

Boston Safe Deposit & Trust won its first major master trust account in 1978 when it was hired by the then-Mountain Bell pension fund, a $600 million account. Soon after, Eastman Kodak Co., Rochester, N.Y., hired the company. Last year, Boston Safe Deposit & Trust was hired by the nation's largest pension fund, the $44 billion California Public Employee Retirement System, as master custodian.

Besides master trust and master custody, The Boston Co. now manages $14.4 billion, with $10.1 billion of that in active accounts and $4.3 billion in passive accounts.

As with master trust, The Boston Co. was late getting into the index fund arena, beginning seriously only in 1983, but it has gained rapidly.

Rapid growth apparently has not hurt the quality of the company's services.

Claude R. Perrier, executive director of the $1.4 billion Maine State Retirement System, said his fund was well satisfied with The Boston Co.'s services. Besides serving as master custodian, it is running close to $400 million for Maine, said Mr. Perrier. These assets are in an index fund and in a cash management program.

In addition, The Boston Co. carries out a securities lending program for the fund. "All in all, they have a nice range of services," he said. ■

# Program set to accredit consultants

SCOTTSDALE, Ariz. — The Institute for Investment Management Consultants is offering a national certification and accreditation program for investment consultants and those interested in the profession.

The national, non-profit organization is embarking on a major membership campaign as a prologue to developing continuing education and recognition programs for consultants.

Veteran consultants can earn designation as chartered certified investment management consultants by meeting eight criteria based on expertise, comprehensive services provided and longevity in the profession. The chartered CIMCs will make up a national certification board, which will establish certification criteria for future CIMCs.

Consultants who do not satisfy the charter certification criteria and those who want to build their credentials as investment management consultants can participate in the IIMC accreditation program, which will consist of home-study courses resulting in the designation accredited investment management consultant.

Money managers who regularly work with consultants can join as associate members. Consultants and those interested in the profession qualify for general membership.

Information about membership, certification and accreditation can be obtained by contacting IIMC, P.O. Box 6123, Scottsdale, Ariz. 85261, or by calling (602) 482-6705. ■

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PIPER

# 'Junk' turns into gold for fund

By Trudy Ring

Small bond funds concentrating on high-yield and high-coupon instruments fared well in the quarter and year ended June 30, according to Pensions & Investments' Performance Evaluation Report.

The report ranks 288 pooled fixed-income funds run by banks and insurance companies. During the quarter and year, the median PIPER bond fund return topped the Shearson Lehman Hutton Government/Corporate bond index, returning 1.2% and 7.7% respectively, against the index's 1% and 7.5%.

For longer periods, however, the median return trailed the index. For the three years ended June 30, the median fund had a compound annual return of 10.2%, compared with the index's 10.7%. For the five years, the median was 11.5%, vs. 12.2% for the index, and for the 10 years, the median fund returned 10.4% against 10.8% for the index. All returns for periods of more than a year are annualized.

In the quarter, First Variable Life Insurance Co., Little Rock, Ark., took top honors with a 5.6% return for its high-yield fund. The $2 million fund invests in junk bonds, but is particular about the quality of the issuing company.

"We are extremely selective in what we buy," said Rebecca H. Gartner, vice president of Amherst Investment Management, Little Rock, an affiliated company that runs the fund. "We buy for the long haul — we do not buy for the flip."

The fund was second for the year, with 11.5%. It also finished in the top 10% for the three- and five-year periods, with 13.6% and 14.1% respectively. The fund is too new to be included in the 10-year period.

Ms. Gartner attributed the fund's success to buying bonds of companies that are high-quality operations despite the below-investment-grade status of the securities. Investments in **Lorimar-Telepictures Corp., Knoll International Holdings Inc., Borg-Warner Holdings Corp.** and **Tonka Corp.** made big profits for the fund recently, she said. The fund's average maturity is 17 years.

Another high-yield fund, Washington-based Union Labor Life Insurance Co.'s Separate Account B, was first for the year with 12.7%. It was sixth for the quarter, with nearly 3%, and in the top 20% for the three- and five-year periods, with 11.8% and 12.6% respectively. It also is too new for the 10-year period.

The $15 million fund concentrates on bonds of basic-industry companies that have solid fundamentals or turnaround potential, said Barbara Riley, senior security analyst. It is about evenly divided among bonds rated BAA, BB and B. Maturities now range from seven to 15 years, slightly shorter than in the first quarter of 1988, because the fund has assumed a defensive posture against a possible interest rate increase, Ms. Riley said.

**Fixed-income funds**
**(periods ended June 30, 1988)**

| | 1st qtr. | 1 yr. | 3 yr. | 5 yr. | 10 yr. |
|---|---|---|---|---|---|
| Highest return | 5.6 | 12.7 | 15.6 | 15.7 | 13.6 |
| First quartile | 1.4 | 8.4 | 11 | 12.2 | 11.1 |
| Median | 1.2 | 7.7 | 10.2 | 11.5 | 10.4 |
| Third quartile | 1 | 6.9 | 9.3 | 10.7 | 9.7 |
| Lowest return | −1.7 | −0.5 | 1.9 | 7.9 | 6.4 |
| Shearson Lehman | 1 | 7.5 | 10.7 | 12.2 | 10.8 |

It made particularly good returns recently with securities of **Borg-Warner, Addington Resources Inc.** and **Chevy Chase Savings and Loan Association,** Ms. Riley said.

Beverly Trust Co., Chicago, which concentrates on investment-grade, high-coupon corporate bonds, was third for the year with 11.4%. It was in the top 10% for the quarter with 1.8%, the three-year period with 13.8% and the five-year period with 14.6%. It was second among all funds for the 10-year period, with 13.2%.

Beverly Trust looks for long bonds with short call provisions, said Ron Stajkowski, president. While many of the bonds in the $9 million fund might mature past 2000, most of them have calls in five or six years, he said. Call provisions keep the bonds' value from being affected by swings in the long bond market, he said.

The fund's average quality rating is in the BAA to A range, he added.

Sunburst Bank, Jackson, Miss., was second in the quarter with 3.7%. Heavy investments in convertible bonds, which suffered during the October stock market crash, hurt its performance for the year, when it was in the bottom 10% with 3.4%.

In the three- and five-year periods, its performance was excellent, placing it fourth among all funds with returns of 14.2% and 15% respectively. In the 10-year period, it was in the bottom 20% with 9.6%; this reflects the time before the fund's management team changed in 1984, said Ashby Foote, trust investment officer.

The $1.5 million fund takes a top-down approach to the market, evaluating the interest rate environment, inflation outlook and risk-reward spectrum of fixed-income securities, then assembling the portfolio, Mr. Foote said. It seeks both coupon income and capital appreciation over the long term, he said.

The fund still has a high allocation to convertibles, 57%. "We feel they offer some very good values right now," Mr. Foote said. It is about 25% in long Treasuries and zero-coupon bonds, 7.5% in straight corporates, 4% in mortgage-backed securities and the remainder in cash, he said. Average quality rating is AAA for straight bonds and B+ for convertibles; average maturity is 20 years.

United Bank of Denver, a perennial PIPER leader, topped the rankings for longer periods, with 15.6% for three years, 15.7% for five years and 13.6% for 10 years. It fell in the rankings but stayed above the median for the year, with 8%, and quarter, with 1.3%.

Delaware Trust Co., Wilmington, another frequent leader, was second for the three-year period, with 15.4%, and five-year period, with 15.7%. It was in the top 20% for the year, with 9.2%, and top 30% for the quarter, with 1.4%. It is too new for the 10-year period.

Third-place finishers were Equitable Capital Management Corp., New York, in the three-year period with 14.9%; Transamerica Life Insurance Co., Los Angeles, in the five-year period with 15.1%; and Sovran Bank, Richmond, Va., in the 10-year period with 13.1%. ■

# Returns stack up

## Quants, contrarians take equity lead

By Carol Wiley

Quantitative and contrarian investment philosophies were the successful management styles for pooled equity funds in Pensions & Investments' Performance Evaluation Report for the quarter and year ended June 30.

The top pooled equity fund for the quarter was managed by Centerre Trust Co., St. Louis. Its $67 million fund posted a return of 14.5% for the quarter, compared with 6.7% for the Standard & Poor's 500 stock index and 5.5% for the PIPER median fund.

The top fund for the year, reporting a 17.2% return vs. the S&P's −6.9% and the median's −5.2%, was First Chicago Investment Advisors' $480 million Institutional Equity Fund.

The median return of the 318 bank and insurance company pooled equity funds in the PIPER universe trailed the index in the longer performance periods, with compound annualized returns of 14.9%, 12.4% and 15.6%, for three, five and 10 years, respectively, against the index's 16.6%, 14.6% and 16.4%.

All PIPER returns for periods of more than one year are annualized.

The Centerre fund is "basically a long-term, quantitative, valuation, akin to a dividend discount model," said James McGuire, senior vice president and chief investment officer.

Although the fund benefited from "a couple of undervalued stocks and an LBO situation, mostly the market was paying more attention to long-term values, and it was a year of surprisingly few mistakes," Mr. McGuire said.

The fund sold holdings in **Chemical New York Corp.** and **First Interstate Bancorp.** when the stocks became fairly valued during the quarter and is now buying technology stocks, such as **Digital Equipment Corp.** and **Avnet Inc.**

First Chicago's fund contains large- and small-capitalization stocks that might be out of favor, and benefits from risk hedging, according to Gary Brinson, president.

"Our stock performance has been helped by individual issues, rather than industry strategies," he said.

Those issues include **MCI Communications Corp.** and **Intel Corp.**, as well as **The Chase Manhattan Corp., Citicorp** and **Security Pacific Corp.**

Two bank funds ranking in the top five for the quarter and top 10 for the year are managed by quantitative contrarian James Investment Research Inc., Alpha, Ohio — the $5. 5 million Equity Fund C of Bank One, Richmond, Ind., and the $13.5 million Cliran Equity Fund of Citizens Heritage Bank, Piqua, Ohio.

Bank One's fund was second in the quarter with 14.4% and fourth for the 12 months with 12%; the Cliran fund ranked fifth for the quarter with 11.3% and ninth for the year with 6.1%.

A third fund managed by James, the $7 million Retirement Fund C at State Bank & Trust Co., Defiance, Ohio, was sixth for the year with a return of 9.7%; first for the three years with 27.4%, and second for the five years with 19.6%.

"Since the crash, our indicators say there won't be a recession, so we're buying stock in those companies that benefit from a strong economy, such as chemicals, manufacturing, building, high-tech and computer stocks," said Frank James III, vice president.

The firm has been buying stock in **Dow Chemical Co., Ford Motor Co.** and **Businessland Inc.**, Mr. James said.

There has been an overall trimming of some stocks, but "no grand theme" among sales, he said.

Perennial PIPER equity leader Sun Banks, Orlando, Fla., reported returns for its $380 million Corporate Equity Fund that placed it in the top three for the three-year period, and first in the five- and 10-year periods. For the shorter periods, however, it dropped, placing in the eighth decile for the quarter and the fourth decile for the year, "even though we have continued to have above average holdings," according to Anthony Gray, president and chief investment officer, Sun Bank Investment Management Group.

The Sun Bank fund is actively managed, has high turnover and concentrates on large growth stocks.

**Pooled equity funds**
**(periods ended June 30, 1988)**

| | 1st qtr. | 1 yr. | 3 yr. | 5 yr. | 10 yr. |
|---|---|---|---|---|---|
| Highest return | 14.5 | 17.2 | 30.2 | 24.5 | 23 |
| First quartile | 6.6 | −2.2 | 16.9 | 14.7 | 16.8 |
| Median | 5.5 | −5.2 | 14.9 | 12.4 | 15.6 |
| Third quartile | 4.4 | −8.1 | 12.9 | 10.7 | 14.1 |
| Lowest return | −2 | −32 | 4.6 | 3.3 | 8.7 |
| S&P 500 | 6.7 | −6.9 | 16.6 | 14.6 | 16.4 |

"Two torpedoes hit us: **Tandem (Computers)** and **Liz Claiborne (Inc.)** had bad earnings reports, and technology stocks killed us," Mr. Gray said. "The problem really is a large number of stocks have done poorly for us this year; the smaller companies are doing great, but their stocks aren't doing well."

Food and large growth stocks continue to do well, he said, and the fund is holding positions in **Alberto-Culver Co., Ralston Purina Co.** and **Quaker Oats Co.**

First Fidelity Bank of Newark, N.J., had two funds that ranked highly in the short-term periods. Its $46 million employee benefits common stock fund reported 12.8% for the quarter, ranking third, and the $16 million discretionary common stock fund returned 13.3% for the year, also ranking third.

The employee benefits fund tends to emphasize large-cap, high-quality companies, such as **IBM Corp.** and **General Electric Co.**, said Richard Nicholson, senior vice president, and regional banks, such as **Shawmut Corp.** and **PNC Financial Corp.**

The fund picks stocks that are driven by earnings, projected over three years, and strives for long-term continuity, Mr. Nicholson said.

The discretionary fund is value-oriented, combined with quantitative screening for small companies with very low beta (a measure of the stock's volatility relative to the S&P 500).

For the quarter, the fund held stock in consumer discretionary companies, such as **Bassett Furniture Industries, Hartmarx Corp.** and **Russ Togs Inc.**, and in producer durables, such as **General Signal Corp. The Timken Co.** and **West Point-Pepperell Inc.**

United Bank of Denver's $26 million equity fund returned 12.6% for the quarter, 15.6% for the year and 22% for the three years.

W. Lon Schreur, president of United Capital Management, the bank's investment management arm, said the fund's "hard-core contrarian" philosophy focused on the metals industries, such as **Bethlehem Steel Corp., Inland Steel Industries Inc.** and **KaiserTech Ltd.**; capital goods, such as **Clark Equipment Co., GATX Corp.** and **Caterpillar Inc.**; and special equities, such as **Long Island Lighting Co.**

The fund is now fully invested, and no stocks are being sold, Mr. Schreur said. ■

PIPER

## Top fixed funds by size

### 1-year returns

### Over $100 million

| | % |
|---|---|
| Trust Co./West (High yield) | 9.9 |
| Principal Mutual Life, Iowa | 9.9 |
| Equitable Capital (5), N.Y. | 9.6 |
| Trustmark Nat'l, Miss. | 9.5 |
| First Union Bank (1), N.C. | 9.4 |
| First Kentucky Trust | 9.2 |
| Mercantile Bank, Mo. | 9.1 |
| First Chicago | 9.1 |
| American Security, D.C. | 9.1 |
| Hawaiian Trust (Defensive) | 8.8 |

### $50 million to $100 million

| | % |
|---|---|
| Transamerica Life (SA T-2) | 10.1 |
| Northern Trust, Ill. | 9.7 |
| Citicorp (Bondshift), N.Y. | 9.5 |
| Travelers (D), Conn. | 9.1 |
| First of Minneapolis | 9.0 |
| Midlantic Nat'l, N.J. | 8.8 |
| Mercantile Safe (Inter.) | 8.7 |
| Texas Commerce (Low vol.) | 8.3 |
| First Interstate of Wis. (Inc.) | 8.2 |
| Chase Manhattan (Sec. mtg.) | 8.2 |

### $10 million to $50 million

| | % |
|---|---|
| Union Labor Life (SA B), D.C. | 12.7 |
| Norstar Trust, N.Y. | 11.3 |
| IAA Trust (B), Ill. | 10.4 |
| Capital Trust, Ore. | 10.3 |
| Wilmington Trust, Del. | 9.8 |
| First Interstate of California | 9.3 |
| HT Investors (A), R.I. | 9.3 |
| Delaware Trust | 9.2 |
| First Trust, Minn. | 9.1 |
| First of Maryland | 9.0 |

### Under $10 million

| | % |
|---|---|
| First Variable Life, Ark. | 11.5 |
| Beverly Bank, Ill. | 11.4 |
| General American (SA 9), Mo. | 11.1 |
| Exchange Nat'l Bank, Ill. | 9.4 |
| Second Nat'l Bank, Ohio | 9.4 |
| Colonial American Nat'l, Va. | 9.3 |
| Sovran Bank/Central South | 9.0 |
| Frost Nat'l, Texas | 8.6 |
| Valley Nat'l (II), Ariz. | 8.3 |
| EF Hutton (2), Del. | 8.2 |

### 10-year returns

### Over $100 million

| | % |
|---|---|
| Centerre Trust, Mo. | 12.5 |
| Pacific Mutual, Calif. | 12.5 |
| American Security, D.C. | 12.4 |
| Texas Commerce (Active) | 12.4 |
| First Kentucky Trust (Ret.) | 12.1 |
| Hibernia Nat'l, La. | 11.8 |
| Northern Trust (Inter.), Ill. | 11.4 |
| Boatmen's Nat'l, Mo. | 11.4 |
| Mercantile Bank, Mo. | 11.3 |
| John Hancock, Mass. | 11.3 |

### $50 million to $100 million

| | % |
|---|---|
| Life of Virginia | 12.1 |
| First Jersey Nat'l, N.J. | 11.7 |
| Manufacturers Detroit | 11.5 |
| Bankers Trust (B), N.Y. | 11.4 |
| Bankers Trust (A), N.Y. | 11.3 |
| Ameritrust (Reserve), Ohio | 11.2 |
| Trust Services of America | 11.0 |
| Massachusetts Mutual | 10.8 |
| Northern Trust, Ill. | 10.8 |
| First Fidelity (Inter.), N.J. | 10.6 |

### $10 million to $50 million

| | % |
|---|---|
| United of Denver | 13.6 |
| Fidelity Bank, Pa. | 12.3 |
| Sanwa Bank (C), Calif. | 12.0 |
| First Interstate of California | 11.9 |
| First Interstate of Arizona | 11.8 |
| First Wisconsin Asset Mgmt. | 11.7 |
| Cullen Bank, Texas | 11.5 |
| Boatmen's FNB Kansas City | 11.5 |
| IAA Trust (B), Ill. | 11.4 |
| American Nat'l Bank, Tenn. | 11.3 |

### Under $10 million

| | % |
|---|---|
| Beverly Bank, Ill. | 13.2 |
| Central Fidelity, Va. | 11.7 |
| Connecticut Nat'l Bank | 11.7 |
| Sovran Bank/Central South | 11.6 |
| Second Nat'l Bank, Ohio | 11.1 |
| Colonial American Nat'l, Va. | 11.1 |
| Oregon Bank | 10.9 |
| Exchange Nat'l Bank, Ill. | 10.7 |
| Firstier Bank Lincoln, Neb. | 10.6 |
| Assoc. Manitowoc (High), Wis. | 10.3 |

## Top quartile commingled fixed-income funds

### 3-month returns

| | % |
|---|---|
| First Variable Life, Ark. | 5.6 |
| Sunburst Bank, Miss. | 3.7 |
| Wellington Trust (High yield) | 3.6 |
| Sanwa Bank (C), Calif. | 3.4 |
| Trust Co. of the West(High yield) | 3.3 |
| Union Labor Life (SA B), D.C. | 3.0 |
| State Street Bank, Mass. | 2.9 |
| Bank of Delaware | 2.6 |
| Colonial American Nat'l, Va. | 2.5 |
| California First | 2.4 |
| First Interstate of California | 2.2 |
| HT Investors (A), R.I. | 2.2 |
| Hawaiian Trust (Defensive) | 2.1 |
| Signet Trust (Stable), Va. | 2.1 |
| Equitable Capital (5), N.Y. | 2.0 |
| Nevada Nat'l Bank | 1.9 |
| Sovran Bank (Inst.), Va. | 1.9 |
| Jefferson Trust, Ill. | 1.9 |
| Union Labor Life (SA G), D.C. | 1.9 |
| Banc One Asset, Ohio | 1.8 |
| First American of Georgia | 1.8 |
| First Interstate of Wisconsin | 1.8 |
| Beverly Bank, Ill. | 1.8 |
| Northern Trust, Ill. | 1.8 |
| First Chicago (Dollar) | 1.8 |
| Norwest Bank, Minneapolis | 1.8 |
| Mercantile Bank, Mo. | 1.8 |
| Trust Services of America, Calif. | 1.8 |
| First Interstate of Oregon | 1.7 |
| American Security, D.C. | 1.7 |
| Bank of Tokyo (Inter.), N.Y. | 1.7 |
| Exchange Nat'l Bank, Ill. | 1.7 |
| IAA Trust (B), Ill. | 1.7 |
| Travelers (SA D), Conn. | 1.7 |
| Trustcorp Bank, Ohio | 1.6 |
| Valley Fidelity, Tenn. | 1.6 |
| General American (SA 9), Mo. | 1.6 |
| Boatmen's FNB Kansas City, Mo. | 1.6 |
| Bank of the West, Calif. | 1.6 |
| First of Toledo, Ohio | 1.6 |
| The New England, Mass. | 1.6 |
| Wheeling Dollar Bank, W.Va. | 1.6 |
| Key Trust, N.Y. | 1.5 |
| Dauphin Deposit (Short), Pa. | 1.5 |
| Cullen Bank, Texas | 1.5 |
| Harris Trust, Ill. | 1.5 |
| CIGNA Corp. (Inter.), Conn. | 1.5 |
| Mutual of New York (Private) | 1.5 |
| Pacific Financial (Hyr.), Calif. | 1.5 |
| First Union Bank, N.C. | 1.5 |
| Morgan Guaranty, N.Y. | 1.5 |
| Capital Trust, Ore. | 1.5 |
| Chicago Title & Trust | 1.5 |
| Wachovia Bank, N.C. | 1.5 |
| American Nat'l Bank, Ind. | 1.5 |
| Security Nat'l Bank (II), W.Va. | 1.5 |
| First of Maryland | 1.4 |
| Delaware Trust | 1.4 |
| Mid-State Bancorp, Pa. | 1.4 |
| Wilmington Trust, Del. | 1.4 |
| Central Fidelity (Short), Va. | 1.4 |
| Bank of New England, Mass. | 1.4 |
| First Interstate of Arizona | 1.4 |
| Home Life, N.Y. | 1.4 |
| First Wisconsin Asset | 1.4 |
| Bank of America, Calif. | 1.4 |
| Principal Mutual Life, Iowa | 1.4 |
| First Interstate of Washington | 1.4 |
| Mercantile Safe, Md. | 1.4 |
| American Nat'l Bank, Ind. | 1.4 |
| Sun Bank, Fla. | 1.4 |
| First Interstate of Oklahoma | 1.4 |
| First Chicago | 1.4 |
| First Alabama Bank | 1.4 |
| Nat'l Bank of Detroit | 1.4 |
| **Shearson Lehman G/C Index** | **1.0** |

### 1-year returns

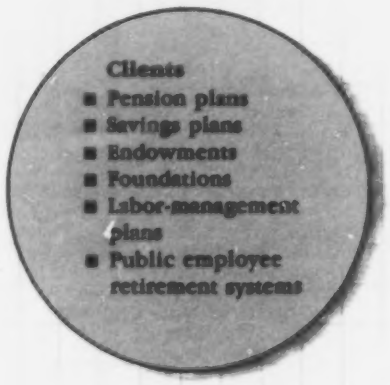
| | % |
|---|---|
| Union Labor Life (SA B), D.C. | 12.7 |
| First Variable Life, Ark. | 11.5 |
| Beverly Bank, Ill. | 11.4 |
| Norstar Trust, N.Y. | 11.3 |
| General American (SA 9), Mo. | 11.1 |
| IAA Trust (B), Ill. | 10.4 |
| Capital Trust, Ore. | 10.3 |
| Transamerica (SA T-2), Calif. | 10.1 |
| Harris Trust, Ill. | 10.1 |
| Trust Co. of the West (High yield) | 9.9 |
| Principal Mutual Life, Iowa | 9.9 |
| Wilmington Trust, Del. | 9.8 |
| Sovran Bank (Inst.), Va. | 9.7 |
| Northern Trust, Ill. | 9.7 |
| Harris Trust (Gain), Ill. | 9.6 |
| State Street Bank, Mass. | 9.6 |
| Equitable Capital (5), N.Y. | 9.6 |
| Trustmark Nat'l, Miss. | 9.5 |
| Citicorp (Bondshift), N.Y. | 9.5 |
| Morgan Guaranty, N.Y. | 9.4 |
| First Union Bank (1), N.C. | 9.4 |
| Exchange Nat'l Bank, Ill. | 9.4 |


# The Prudential Asset Management Group

The Prudential Asset Management Group is a uniquely structured organization providing investment management services to employee benefit plans, endowments, foundations and other institutional clients. The Group consists of separately managed investment firms, which are either components or affiliates of The Prudential Investment Corporation, Prudential's principal investment management subsidiary.

Each investment firm is run independently but has the financial backing of The Prudential. All share a singular commitment to provide superior investment performance to institutional clients.

To find out more about The Prudential Asset Management Group, call Jim Blanchard at (201) 877-7041.



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| | |
|---|---|
| Second Nat'l Bank (Emp.), Ohio | 9.4 |
| First Interstate of California | 9.3 |
| HT Investors (A), R.I. | 9.3 |
| Colonial American Nat'l, Va. | 9.3 |
| First Kentucky Trust | 9.2 |
| Delaware Trust | 9.2 |
| Mercantile Bank, Mo. | 9.1 |
| Travelers (SA D), Conn. | 9.1 |
| First Chicago | 9.1 |
| First Trust Co., Minn. | 9.1 |
| Banc One Asset (Invt.), Ohio | 9.1 |
| American Security, D.C. | 9.1 |
| First of Minneapolis | 9.0 |
| Wheeling Dollar Bank, W.Va. | 9.0 |
| First of Maryland | 9.0 |
| Phoenix Mutual, Conn. | 9.0 |
| Sovran Bank/Central South | 9.0 |
| Bank of Tokyo (Inter.), N.Y. | 9.0 |
| Bank of Delaware | 8.9 |
| First Interstate of Oregon | 8.9 |
| Sanwa Bank (C), Calif. | 8.9 |
| Midlantic Nat'l, N.J. | 8.8 |
| Mid-State Bankcorp, Pa. | 8.8 |
| Norwest Bank, Minneapolis | 8.8 |
| Hawaiian Trust (Defensive) | 8.8 |
| Summit Trust, N.J. | 8.7 |
| Mercantile Safe (Inter.), Md. | 8.7 |
| Frost Nat'l, Texas | 8.6 |
| Boatmen's FNB Kansas City, Mo. | 8.6 |
| Pacific Mutual, Calif. | 8.6 |
| First Nat'l Mercantile (B), Mo. | 8.6 |
| Valley Fidelity, Tenn. | 8.6 |
| John Hancock, Mass. | 8.6 |
| CIGNA Corp. (Inter.), Conn. | 8.6 |
| Signet Trust (Stable), Va. | 8.5 |
| Fidelity Bank, Pa. | 8.5 |
| Wellington Trust (G/C), Mass. | 8.5 |
| Nat'l Bank of Detroit | 8.5 |
| California First Bank | 8.4 |
| Society Nat'l, Ohio | 8.4 |
| Cullen Bank, Texas | 8.4 |
| Chase Manhattan (Short-inter.) | 8.4 |
| Wachovia Bank, N.C. | 8.4 |
| First Bank Milwaukee | 8.4 |
| **Shearson Lehman G/C Index** | **7.5** |

### 3-year returns

| | % |
|---|---|
| United of Denver | 15.6 |
| Delaware Trust | 15.4 |
| Equitable Capital (5), N.Y. | 14.9 |
| Sunburst Bank, Miss. | 14.2 |
| Transamerica Life (SA T-2) | 14.2 |
| Beverly Bank, Ill. | 13.8 |
| First Variable Life, Ark. | 13.6 |
| Principal Mutual Life, Iowa | 13.3 |
| Chase Manhattan (Long), N.Y. | 13.2 |
| Centerre Trust, Mo. | 13.2 |
| IAA Trust (B), Ill. | 13.0 |
| Connecticut Nat'l Bank | 12.7 |
| Colonial American Nat'l, Va. | 12.6 |
| Metropolitan Life (SA 41) | 12.5 |
| General American (SA 9), Mo. | 12.4 |
| First Interstate of Arizona | 12.3 |
| Morgan Guaranty, N.Y. | 12.3 |
| Chase Manhattan (A), N.Y. | 12.2 |
| First Kentucky Trust | 12.2 |
| Sanwa Bank (C), Calif. | 12.2 |
| Travelers (SA P), Conn. | 12.2 |
| Sovran Bank (Inst.), V.A. | 12.1 |
| Mutual of New York (Private) | 12.0 |
| Pacific Mutual, Calif. | 12.0 |
| American Security, D.C. | 12.0 |
| Harris Trust, Ill. | 11.9 |
| Norstar Trust, N.Y. | 11.9 |
| CoreStates,Pa. | 11.9 |
| First Chicago | 11.9 |
| Nat'l Bank of Commerce, Neb. | 11.9 |
| Fidelity Bank, Pa. | 11.9 |
| Northern Trust, Ill. | 11.9 |
| Exchange Nat'l Bank, Ill. | 11.8 |
| Union Labor Life (SA B), D.C. | 11.8 |
| Trust Services of America, Calif. | 11.8 |
| Citicorp, N.Y. | 11.7 |
| Society Nat'l, Ohio | 11.7 |
| John Hancock, Mass. | 11.7 |
| Connecticut Nat'l (Inter.) | 11.7 |
| CIGNA Corp. (Active), Conn. | 11.6 |
| Comerica Bank, Mich. | 11.5 |
| First Nat'l Mercantile (B), Mo. | 11.5 |
| Colorado Nat'l Bank | 11.5 |
| Manufacturers Life (B), Ontario | 11.5 |
| Bankers Trust (A), N.Y. | 11.4 |
| Phoenix Mutual, Conn. | 11.4 |
| Wachovia Bank, N.C. | 11.4 |
| Continental Illinois | 11.4 |
| Bank of America, Calif. | 11.4 |
| Chicago Title & Trust | 11.3 |
| Wellington Trust (G/C), Mass. | 11.3 |
| First Interstate of California | 11.2 |
| First City Nat'l Houston | 11.2 |
| Bessemer Trust, N.Y. | 11.2 |
| First of Omaha (C), Neb. | 11.1 |
| Mercantile Safe, Md. | 11.1 |
| MTrust, Texas | 11.1 |
| First RepublicBank (Long), Texas | 11.1 |
| Liberty Nat'l, Ky. | 11.1 |
| Massachusetts Mutual | 11.1 |

## Top equity funds by size

### 1-year returns

### Over $100 million

| | % |
|---|---|
| First Chicago | 17.2 |
| U.S. Nat'l of Oregon (Qualivest) | 1.8 |
| First Jersey Nat'l, N.J. | 1.5 |
| Fidelity Mgmt. (Inc.), Mass. | 1.3 |
| Bessemer Trust, N.Y. | −0.3 |
| Markston Invest. Mgmt. | −0.6 |
| Meridian Trust, Pa. | −1.3 |
| Massachusetts Mutual | −1.7 |
| Principal Mutual, Iowa | −2.0 |
| AmeriTrust (Divers.), Ohio | −3.0 |

### $50 million to $100 million

| | % |
|---|---|
| Sovran Bank (Inst.), Va. | 3.0 |
| Centerre Trust, Mo. | 2.5 |
| Phoenix Mutual, Conn. | −0.7 |
| Citicorp (Stockshift 100), N.Y. | −1.7 |
| Norstar Trust, N.Y. | −2.1 |
| Sentry Life (SA B), Wis. | −2.7 |
| American Security, D.C. | −3.3 |
| First Trust, Minn. | −3.4 |
| Citicorp (Multifact), N.Y. | −3.6 |
| AmSouth, Ala. | −3.7 |
| Chase Manhattan (B), N.Y. | −3.7 |

### $10 million to $50 million

| | % |
|---|---|
| United of Denver | 15.6 |
| First Fidelity (Disc.), N.J. | 13.3 |
| Massachusetts Mutual (SIA S) | 10.4 |
| First Fidelity, N.J. | 7.2 |
| First of Maryland | 6.6 |
| Citizens Heritage (CLIRAN) | 6.1 |
| Crown Life (U.S. grp.), Ontario | 4.2 |
| Jefferson Trust (Growth), Ill. | 3.9 |
| EF Hutton (2), Del. | 3.8 |
| American Nat'l, Minn. | 3.2 |

### Under $10 million

| | % |
|---|---|
| Bank One, Richmond (C), Ind. | 12.0 |
| State Bank (Retire. C), Ohio | 9.7 |
| Security Nat'l, W. Va. | 5.1 |
| Security Nat'l (II), W. Va. | 2.5 |
| Gary Wheaton (Hedged), Ill. | 2.0 |
| Pioneer Bank, Ill. | 1.8 |
| American Security (High yield) | 0.4 |
| First N.H. Invest. (Emp. A) | −0.5 |
| First Illinois (Corp.) | −1.0 |
| First Interstate Billings, Mont. | −2.1 |

### 10-year returns

### Over $100 million

| | % |
|---|---|
| Sun Bank, Fla. | 23.0 |
| First Union Bank, N.C. | 20.2 |
| U.S. Nat'l/Oregon (Qualivest) | 19.8 |
| Bessemer Trust, N.Y. | 19.2 |
| Provident Nat'l, Pa. | 18.7 |
| Equitable Capital (4), N.Y. | 18.6 |
| MTrust (Growth), Texas | 18.6 |
| Principal Mutual Life, Iowa | 18.2 |
| Manufacturers Detroit | 17.9 |
| Massachusetts Mutual | 17.7 |

### $50 million to $100 million

| | % |
|---|---|
| The New England (Sep.cap.) | 19.7 |
| Texas Commerce (Divers.) | 17.2 |
| Sentry Life (SA B), Wis. | 17.1 |
| Norstar Trust, N.Y. | 17.0 |
| Sovran Bank (Inst.), Va. | 16.9 |
| Phoenix Mutual, Conn. | 16.7 |
| Mercantile Safe, Md. | 16.6 |
| AmSouth, Ala. | 16.6 |
| Chase Manhattan (B), N.Y. | 16.4 |
| Centerre Trust, Mo. | 16.3 |

### $10 million to $50 million

| | % |
|---|---|
| First Fidelity (Disc.), N.J. | 20.5 |
| Guardian Ins. (VA 1), N.Y. | 20.2 |
| United of Denver | 19.7 |
| First Interstate of Oklahoma | 19.4 |
| Confederation Life, Ontario | 18.8 |
| First Trust Corp., Colo. | 18.6 |
| U.S. Nat'l of Galveston, Texas | 18.5 |
| First Fidelity Bank, N.J. | 18.4 |
| MTrust (Value), Texas | 18.4 |
| Lake Shore Nat'l, Ill. | 18.1 |

### Under $10 million

| | % |
|---|---|
| First N.H. Investment (Emp. A) | 18.8 |
| Unibanctrust, Ill. | 16.1 |
| Puget Sound Nat'l, Wash. | 15.1 |
| Merchants Nat'l (2), Ind. | 14.9 |
| First Interstate of Texas | 14.9 |
| Second Nat'l (Emp.), Ohio | 14.2 |
| Great West Life (V.A.A.A.) | 14.4 |
| First in Bartlesville, Okla. | 14.4 |
| Associated Manitowoc, Wis. | 14.3 |
| American Nat'l (Growth), Ind. | 14.1 |


| | |
|---|---|
| **Equity Managers** | **PRIFORM Investment Management**<br>Value-oriented strategy |
| | **MIDCO Investors**<br>Small capitalization strategy |
| **Equity-Oriented Balanced Managers** | **Matrix Capital Management**<br>Econometrically driven financial factors strategy |
| | **Hallmark Capital Management**<br>Value-oriented equity and balanced management |
| **Balanced Managers** | **Prudential Diversified Investment Strategies**<br>Asset allocation-discretionary portfolio management |
| | **Capital Supervisors, Inc.**<br>Discretionary balanced management |
| | **Prudential Fixed Income Advisors (PFIA)**<br>Disciplined approaches to fixed income investments |
| | **Gifford Fong Associates**<br>Quantitative fixed income research |
| | **Prudential Realty Group**<br>Portfolio management of real estate income and development properties and mortgage investments |
| **International Managers** | **PCM International**<br>International stock and bond investments |
| | **Mercator Asset Management**<br>Global and international stock strategies |
| | **GIM Global Advisors**<br>Global equity, fixed income, and real estate management |
| | **Investment Index Technologies (INTECH)**<br>Domestic and foreign stock indexing and active core management |
| **Guaranteed Products Manager** | **Prudential Insurance Company of America**<br>Guaranteed investments for pension and savings plans and other institutional accounts |
| **Venture Capital Manager** | **Prudential Venture Capital Management Company**<br>Direct and partnership venture funding |

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| | |
|---|---|
| General American (SA 8), Mo. | 11.0 |
| Aetna Life (SA 76), Conn. | 11.0 |
| Nat'l Bank of Detroit | 11.0 |
| First Chicago (Dollar) | 11.0 |
| Citizens & Southern, Ga. | 11.0 |
| Columbus Bank, Ga. | 11.0 |
| EF Hutton (2), Del. | 11.0 |
| **Shearson Lehman G/C Index** | **10.7** |

### 5-year returns

| | % |
|---|---|
| United of Denver | 15.7 |
| Delaware Trust | 15.7 |
| Transamerica Life (SA T-2), Calif. | 15.1 |
| Sunburst Bank, Miss. | 15.0 |
| Equitable Capital (5), N.Y. | 14.8 |
| IAA Trust (B), Ill. | 14.7 |
| Beverly Bank, Ill. | 14.6 |
| First Variable Life, Ark. | 14.1 |
| Trust Services of America, Calif. | 14.0 |
| Principal Mutual Life, Iowa | 14.0 |
| Centerre Trust, Mo. | 13.9 |
| Connecticut Nat'l | 13.8 |
| Mutual of New York (Private) | 13.6 |
| First Interstate of Arizona | 13.6 |
| Sanwa Bank (C), Calif. | 13.5 |
| Travelers (SA P), Conn. | 13.5 |
| Colonial American Nat'l, Va. | 13.5 |
| Pacific Mutual, Calif. | 13.3 |
| First Kentucky Trust | 13.3 |
| Central Fidelity, Va. | 13.3 |
| Morgan Guaranty, N.Y. | 13.2 |
| First Chicago | 13.1 |
| American Security, D.C. | 13.1 |
| General American (SA 9), Mo. | 13.1 |
| Colorado Nat'l Bank | 13.1 |
| Sovran Bank (Inst.), Va. | 13.1 |
| John Hancock, Mass. | 13.0 |
| First Chicago (Dollar) | 13.0 |
| First Interstate of California | 12.9 |
| CoreStates, Pa. | 12.9 |
| Harris Trust, Ill. | 12.9 |
| Life of Virginia | 12.9 |
| Northern Trust, Ill. | 12.8 |
| First Alabama Bank | 12.8 |
| First Variable life (H. Q.), Ark. | 12.6 |
| Exchange Nat'l Bank, Ill. | 12.6 |
| Society Nat'l, Ohio | 12.6 |
| Union Labor Life (SA B), D.C. | 12.6 |
| Citicorp, N.Y. | 12.6 |
| Norstar Trust, N.Y. | 12.5 |
| State Street Bank, Mass. | 12.5 |
| Nat'l Bank of Commerce, Neb. | 12.5 |
| First of Omaha (C), Neb. | 12.5 |
| Connecticut Nat'l (Inter.) | 12.4 |
| Liberty Nat'l, Ky. | 12.4 |
| California First Bank | 12.4 |
| Fidelity Bank, Pa. | 12.3 |
| First Union Bank (1), N.C. | 12.3 |
| Wellington Trust (G/C), Mass. | 12.3 |
| Manufacturers Detroit | 12.3 |
| General American (SA 8), Mo. | 12.3 |
| CIGNA Corp. (Inter.), Conn. | 12.3 |
| Bankers Trust (A), N.Y. | 12.2 |
| Wachovia Bank, N.C. | 12.2 |
| Second Nat'l Bank, Ohio | 12.2 |
| First Wisconsin Asset | 12.2 |
| First City Nat'l Houston | 12.2 |
| **Shearson Lehman G/C Index** | **12.2** |
| Lincoln Nat'l (Corp.), Ind. | 12.2 |
| CIGNA Corp. (Active), Conn. | 12.2 |
| Nat'l Bank of Detroit | 12.2 |
| Hamilton Bank, Pa. | 12.2 |

### 10-year returns

| | % |
|---|---|
| United of Denver | 13.6 |
| Beverly Bank, Ill. | 13.2 |
| Sovran Bank (Inst.), Va. | 13.1 |
| Centerre Trust, Mo. | 12.5 |
| Pacific Mutual, Calif. | 12.5 |
| American Security, D.C. | 12.4 |
| Texas Commerce (Active) | 12.4 |
| Fidelity Bank, Pa. | 12.3 |
| First Kentucky Trust | 12.1 |
| Life of Virginia | 12.1 |
| Sanwa Bank (C), Calif. | 12.0 |
| First Interstate of California | 11.9 |
| First Interstate of Arizona | 11.8 |
| Hibernia Nat'l, La. | 11.8 |
| Morgan Guaranty, N.Y. | 11.8 |
| First Wisconsin Asset Mgmt. | 11.7 |
| Central Fidelity, Va. | 11.7 |
| Connecticut Nat'l Bank | 11.7 |
| First Jersey Nat'l, N.J. | 11.7 |
| Sovran Bank/Central South | 11.6 |
| Bank of New England, Mass. | 11.5 |
| Manufacturers Detroit | 11.5 |
| Cullen Bank, Texas | 11.5 |
| Boatmen's FNB Kansas City, Mo. | 11.5 |
| Northern Trust (Inter.), Ill. | 11.4 |
| IAA Trust (B), Ill. | 11.4 |
| Boatmen's Nat'l, Mo. | 11.4 |
| Bankers Trust (B), N.Y. | 11.4 |
| Mercantile Bank, Mo. | 11.4 |
| Bankers Trust (A), N.Y. | 11.3 |
| John Hancock, Mass. | 11.3 |
| American Nat'l Bank, Tenn. | 11.3 |
| AmeriTrust (Reserve), Ohio | 11.2 |
| Merchants Nat'l, Pa. | 11.2 |
| Trustcorp Bank, Ohio | 11.2 |
| Mid-State Bancorp, Pa. | 11.2 |
| Society Nat'l, Ohio | 11.2 |
| First of Maryland | 11.1 |
| Wachovia Bank, N.C. | 11.1 |
| Second Nat'l Bank, Ohio | 11.1 |
| First Chicago Invest. Adv. | 11.1 |
| First Bank Milwaukee | 11.1 |
| Colonial American Nat'l, Va. | 11.1 |
| Key Trust, N.Y. | 11.1 |
| Jefferson Trust, Ill. | 11.1 |
| **Shearson Lehman G/C Index** | **10.8** |

A special section on leasing will be published in the Oct. 3 issue of *Pensions & Investment Age*.

## Top quartile commingled equity funds

### 3-month returns

| | % |
|---|---|
| Centerre Trust, Mo. | 14.5 |
| Bank One, Richmond (C), Ind. | 14.4 |
| First Fidelity Bank, N.J. | 12.8 |
| United of Denver | 12.6 |
| Citizens Heritage (CLIRAN), Ohio | 11.3 |
| Citicorp (Multifact), N.Y. | 11.2 |
| Citicorp (Styleshift), N.Y. | 10.9 |
| Citicorp (Stockshift 200), N.Y. | 10.2 |
| State Street Bank (Matrix syn.) | 9.9 |
| First Interstate Billings, Mont. | 9.8 |
| Connecticut Mutual Life | 9.5 |
| Harris Trust (Low p/e), Ill. | 9.5 |
| LaSalle Nat'l (Core), Ill. | 9.2 |
| Commerce Bank-K.C., Mo. | 9.0 |
| Fidelity Mgmt. (Inc.), Mass. | 8.8 |
| Stock Yards Bank (Trust), Ky. | 8.8 |
| California First Bank | 8.7 |
| Harris Trust, Ill. | 8.3 |
| First Tennessee Memphis | 8.3 |
| First Variable Life, Ark. | 8.3 |
| Home Life, N.Y. | 8.2 |
| American Nat'l, Minn. | 8.2 |
| CNA Insurance (SA A), Ill. | 8.0 |
| Security Pacific (E), Calif. | 7.9 |
| State Bank (Retire. C), Ohio | 7.9 |
| Massachusetts Mutual (SIA S) | 7.8 |
| Wellington Trust (Inc.), Mass. | 7.8 |
| Bank of New England (Valuepath) | 7.7 |
| U.S. Nat'l of Galveston, Texas | 7.7 |
| Nat'l City Cleveland, Ohio | 7.7 |
| Chase Manhattan (B), N.Y. | 7.7 |
| Principal Mutual Life, Iowa | 7.6 |
| First Chicago | 7.6 |
| American Security (High yield/gro.) | 7.5 |
| Manufacturers Life, Ontario | 7.4 |
| Northern Trust (Divers.), Ill. | 7.4 |
| First Bank Milwaukee | 7.4 |
| Prudential (VCA-9), N.J. | 7.3 |
| Bankers Trust, N.Y. | 7.3 |
| Wilmington Trust (Growth), Del. | 7.3 |
| Maryland Nat'l | 7.3 |
| Citicorp, N.Y. | 7.2 |
| Minnesota Mutual (SA C) | 7.2 |
| State Street Bank, Mass. | 7.1 |
| Meridian Trust, Pa. | 7.1 |
| Mid-State Bancorp, Pa. | 7.1 |
| Mutual of New York | 7.1 |
| Signet Trust, Va. | 7.1 |
| Manufacturers Life (C), Ontario | 7.1 |
| Guardian Insurance (VA 1), N.Y. | 7.1 |
| Chase Investors (Index), N.Y. | 7.1 |
| Capital Trust (II), Ore. | 7.0 |
| Wellington Trust (Divers.), Mass. | 7.0 |
| First N.H. Investment (Emp. A) | 7.0 |
| PW Trust Co. (Conserv.), N.J. | 6.9 |
| Nat'l Bank of Detroit | 6.9 |
| Travelers (SA), Conn. | 6.9 |
| American Security, D.C. | 6.8 |
| State Street Bank (Value I), Mass. | 6.8 |
| Old Second Nat'l, Ill. | 6.7 |
| EF Hutton (6), Del. | 6.7 |
| Midlantic Nat'l, N.J. | 6.7 |
| General American (Index), Mo. | 6.7 |
| **Standard & Poor's** | **6.7** |
| Security Pacific, Calif. | 6.7 |
| State Street Bank (S&P index) | 6.7 |
| Sovran Bank (Inst.), Va. | 6.6 |
| Citicorp (Stockshift 100), N.Y. | 6.6 |
| Chase Investors (CMB index), N.Y. | 6.6 |
| Bank of America (Index), Calif. | 6.6 |
| Connecticut Nat'l Bank | 6.6 |
| Merchants Nat'l, Pa. | 6.6 |
| Travelers (SA C), Conn. | 6.6 |

### 1-year returns

| | % |
|---|---|
| First Chicago | 17.2 |
| United of Denver | 15.6 |
| First Fidelity Bank (Disc.), N.J. | 13.3 |
| Bank One, Richmond (C), Ind. | 12.0 |
| Massachusetts Mutual (SIA S) | 10.4 |
| State Bank (Retire. C), Ohio | 9.7 |
| First Fidelity Bank, N.J. | 7.2 |
| First of Maryland | 6.6 |
| Citizens Heritage (CLIRAN), Ohio | 6.1 |
| Security Nat'l Bank, W. Va. | 5.1 |
| First RepublicBank, Texas | 4.7 |
| Union Central, Ohio | 4.5 |
| Crown Life (U.S. grp.), Ontario | 4.2 |
| State Street (Matrix syn.), Mass. | 4.1 |
| Jefferson Trust (CT growth), Ill. | 3.9 |
| EF Hutton (2), Del. | 3.8 |
| American Nat'l, Minn. | 3.2 |
| Sovran Bank (Inst.), Va. | 3.0 |
| Guardian Insurance (VA 1), N.Y. | 3.0 |
| U.S. Nat'l of Galveston, Texas | 2.6 |
| Centerre Trust, Mo. | 2.5 |
| Security Nat'l Bank (II), W. Va. | 2.5 |
| Citicorp (Stockshift 200), N.Y. | 2.3 |
| Beverly Bank, Ill. | 2.1 |
| Gary Wheaton Bank (Hedged), Ill. | 2.0 |
| U.S. Nat'l of Oregon (Qualivest) | 1.8 |
| Pioneer Bank, Ill. | 1.8 |
| First Jersey Nat'l, N.J. | 1.5 |
| First Variable Life, Ark. | 1.4 |
| Fidelity Mgmt. (Inc.), Mass. | 1.3 |
| First American of Georgia | 1.1 |
| Confederation Life, Ontario | 1.0 |
| Colorado Nat'l Bank | 1.0 |
| Nat'l Bank of Commerce, Tenn. | 0.9 |
| Central Bank Monroe, La. | 0.8 |
| Liberty Nat'l, Ky. | 0.8 |
| First Alabama Bank (I) | 0.8 |
| American Security (High yield/gro) | 0.4 |
| Key Trust, N.Y. | 0.0 |
| Bessemer Trust, N.Y. | -0.3 |
| First Interstate of Oregon | -0.4 |
| First N.H. Investment (Emp. A) | -0.5 |
| C&S Trust Florida | -0.5 |
| South Carolina Nat'l | -0.6 |
| Markston Invest. Mgmt., N.Y. | -0.6 |
| Phoenix Mutual, Conn. | -0.7 |
| Dominion Trust (Corp.), Va. | -0.8 |
| First Illinois (Personal) | -0.8 |
| Wilmington Trust (Growth), Del. | -0.8 |
| Capital Trust (II), Ore. | -0.9 |
| Resource Bank, Minn. | -0.9 |
| Harris Trust (Low p/e), Ill. | -0.9 |
| First Illinois (Corp.) | -1.0 |
| State Street Bank, Mass. | -1.1 |
| Meridian Trust, Pa. | -1.3 |
| First of Cincinnati | -1.3 |
| First of Omaha (D), Neb. | -1.5 |
| Connecticut Mutual (CM select) | -1.5 |
| Citizens Fidelity (E), Ky. | -1.6 |
| Citicorp (Stockshift 100), N.Y. | -1.7 |
| Massachusetts Mutual | -1.7 |
| Merchants Nat'l, Pa. | -1.8 |
| Wheeling Dollar Bank, W. Va. | -1.9 |
| Principal Mutual Life, Iowa | -2.0 |
| Norstar Trust, N.Y. | -2.1 |
| Wilmington Trust (Total return) | -2.1 |
| First Interstate Billings, Mont. | -2.1 |
| State Street Bank (Value I) | -2.1 |
| Mid-State Bancorp, Pa. | -2.2 |
| First Interstate of Oklahoma | -2.2 |
| **Standard & Poor's** | **-6.9** |

### 3-year returns

| | % |
|---|---|
| Bank One, Richmond (C), Ind. | 30.2 |
| State Bank (Retire. C), Ohio | 27.4 |
| Sun Bank, Fla. | 26.2 |
| First Fidelity (Disc.), N.J. | 22.0 |
| United of Denver | 22.0 |
| EF Hutton (2), Del. | 22.0 |
| South Carolina Nat'l | 22.0 |
| First RepublicBank, Texas | 21.8 |
| First Fidelity, N.J. | 21.6 |
| State Street (Matrix syn.), Mass. | 21.1 |
| First of Maryland | 20.5 |
| First Chicago | 20.2 |
| First Illinois (Corp.) | 19.9 |
| Cullen Bank, Texas | 19.7 |
| Principal Mutual, Iowa | 19.4 |
| Sovran Bank (Inst.), Va. | 19.2 |
| First Illinois (Personal) | 19.2 |
| Pioneer Bank, Ill. | 19.1 |
| Capital Trust (I), Ore. | 19.1 |
| Massachusetts Mutual (SIA S) | 19.1 |
| Valley Nat'l (I), Ariz. | 18.9 |
| Guardian Ins. (VA 1), N.Y. | 18.7 |
| College Ret. Equities Fund | 18.5 |
| Southtrust Bank, Ala. | 18.5 |
| Mutual of America (SA 2), N.Y. | 18.5 |
| Puget Sound Nat'l, Wash. | 18.5 |
| First RepublicBank (Inc.), Texas | 18.5 |
| State Street Bank, Mass. | 18.4 |
| Phoenix Mutual, Conn. | 18.4 |
| First Alabama (I) | 18.4 |
| California First | 18.2 |
| Citicorp (Multifact) | 18.1 |
| Norstar Trust, N.Y. | 18.1 |
| EF Hutton (1), Del. | 17.9 |
| Associated Bank (Neenah), Wis. | 17.8 |
| First Interstate of Texas | 17.7 |
| State Street Bank (Value I) | 17.6 |
| Security Pacific (E), Calif. | 17.6 |
| Citizens Fidelity (E), Ky. | 17.6 |
| Maryland Nat'l | 17.6 |
| U.S. Nat'l of Oregon (Qualivest) | 17.5 |
| Colorado Nat'l | 17.5 |
| Harris Trust (Low p/e), Ill. | 17.5 |
| First American of Georgia | 17.5 |
| First Security Nat'l (D), Ky. | 17.5 |
| First Interstate of Oklahoma | 17.4 |
| Firstier Bank | 17.4 |
| First N. H. Investment (Emp. A) | 17.3 |
| Mutual of New York (Inc.) | 17.3 |
| Dominion Trust (Corp.), Va. | 17.2 |
| Chase Investors (Index), N.Y. | 17.2 |
| American Nat'l, Minn. | 17.2 |
| Crown Life (U.S. grp.), Ontario | 17.2 |
| Wellington Trust (Divers.), Mass. | 17.2 |
| Morgan Guaranty (Large co.) | 17.2 |
| Bessemer Trust, N.Y. | 17.2 |
| Confederation Life, Ontario | 17.1 |
| Lincoln Nat'l Pens. (Growth), Ind. | 17.1 |
| Massachusetts Mutual | 17.1 |
| Meridian Trust, Pa. | 17.1 |
| Citicorp (Indexplus), N.Y. | 17.1 |


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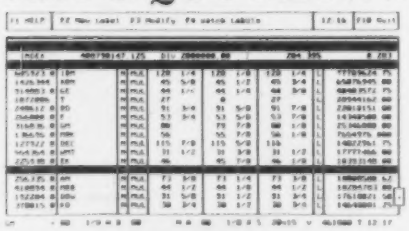

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# Casino issue may be gamble

By Brad Rudin

ATLANTIC CITY, N.J. — The planned $675 million first mortgage bond offering that will finance developer Donald Trump's purchase and completion of the Taj Mahal gambling casino and hotel might be considered a gamble by investors.

Investor concerns about the lack of operating history and publicly available financial projections could result in a wide spread on the high-yield issue.

The scale of the project — the Taj Mahal will be twice as big as any other hotel/casino in Atlantic City — injects an added element of risk because management does not have experience in operating a gambling complex of this size, according to the preliminary prospectus.

Intense competition on an already crowded boardwalk is another factor. Indeed, the Taj Mahal will compete with two other Trump casinos in Atlantic City.

"The Taj Mahal formula is a sure thing in Atlantic City. However, the Taj opening, along with several other casino floor space additions, may up the ante in the competitive war for labor and patrons in Atlantic City," said Stephen C. Freidheim, the gaming and lodging analyst in the high-yield research group at Kidder, Peabody & Co., New York.

High-yield investors, whose risk tolerance is lower than that of Atlantic City's high rollers, also might be concerned that the casino and hotel that back the debt are not yet complete. The Taj Mahal is expected to open in December 1989.

Still, Mr. Trump — a hugely successful and highly visible New York real estate developer — has a reputation that probably will generate investor interest in the offering. Mr. Trump has a 100% equity stake in the partnership that owns the Taj Mahal. Bond analysts said it was too early to gauge investor interest in the 15-year issue, which is expected to be priced in September.

## Financing

Neither Moody's Investors Service nor Standard & Poor's Corp. has yet assigned a rating to the offering.

Mr. Trump bought the partly finished Taj Mahal from entertainer/businessman Merv Griffin in a $261 million transaction completed in May. Simultaneously, Mr. Griffin bought Resorts International Inc. from Mr. Trump for $302.6 million.

Depending on the amount of available cash flow from operations, Mr. Trump will be able to recover his $75 million investment in the Taj Mahal if it turns out the project was overfunded.

If the Taj Mahal opens when anticipated, bondholders can expect the casino's 3,000 slot machines and 160 gaming tables to start pumping out the cash needed to pay half of the third interest payment due under the indenture. The other half of the third payment — due March 1, 1990 — would come from proceeds from the offering. The first two payments — due March 1, 1989 and Sept. 1, 1989 — also are to be funded with the proceeds.

Funds for interest payments after March 1, 1990, are expected to come from operating revenue, but the partnership could borrow — subject to certain limitations — additional money to finance these payments. Specific plans for this contingency have not been drawn up, said Joseph Silver, assistant general counsel of the Trump Organization in New York.

Failure to substantially complete the project by March 1, 1990, is an event of default unless the delay results from extraordinary events not under the partnership's control. The trustee for the bondholders can then rely on Mr. Trump's guarantee that the Taj Mahal will be substantially complete by March 1, 1991. If the project were not completed by that date — unless extraordinary events caused the delay — the trustee could then take charge of the project and bill Mr. Trump for the cost.

A delayed opening would put investors at risk because foreclosure on the incomplete buildings wouldn't fetch enough to service the debt. And the $460 million in cash held by the company issuing the bonds — Trump Taj Mahal Funding Inc. — would not be available to investors because of a provision in the indenture that excludes cash and other instruments from the collateral.

In the event of default, investors have no recourse against Mr. Trump.

Investors, who start out as secured lenders, would have the status of unsecured lenders when it came time to collect the difference between the value of the collateral and the amount needed to service the debt, according to the registration statement filed by Trump Taj Mahal Funding. Merrill Lynch Capital Markets is the sole manager of the issue, due in 2003.

Net proceeds from the offering, $649 million, will be used to finance the $353.3 million needed to complete the Taj Mahal. The proceeds also will be used to fund $109.7 million in interest payments for a period 15 months from issuance and to repay $186 million used to finance a portion of the acquisition cost.

The bonds can be called any time after Sept. 1, 1991, but redemptions made before Sept. 1, 1993, are barred if the call is financed with borrowings carrying a coupon of less than a certain rate. That rate was not specified in the preliminary prospectus. ■

## City ordered to contribute

NEW ORLEANS — A municipal court judge has ordered the city of New Orleans to continue making monthly contributions to one of the two plans administered by the New Orleans Fire Fighters Pension and Relief Fund.

The city had ordered contributions temporarily halted to the pay-as-you-go plan because it had built up assets of about $5.8 million. City officials wanted the fund to use the cushion to make benefit payments and spare the budget-strapped city from making contributions to the plan for the last seven months of 1988.

Plan executives petitioned the civil court claiming the asset cushion was necessary to guarantee future benefit payments and to maintain the system as actuarially sound.

The court ordered the city to continue its $850,000 monthly contributions, but said the contribution may be reduced to prevent the fund from exceeding the $5.8 million ceiling.

A second fund, with assets of $60 million, was not affected by the legal proceedings.

| | |
|---|---|
| Markston Invest. Mgmt., N.Y. | 17.0 |
| Signet Trust, Va. | 17.0 |
| Nat'l Bank of Commerce, Tenn. | 16.9 |
| Barnett Banks Trust, Fla. | 16.9 |
| Trust Services of America, Calif. | 16.9 |
| **Standard & Poor's** | **16.6** |

### 5-year returns

| | % |
|---|---|
| Sun Bank, Fla. | 24.5 |
| State Bank (Retire. C), Ohio | 19.6 |
| First RepublicBank, Texas | 19.0 |
| First Fidelity (Disc.), N.J. | 18.9 |
| MTrust (Value), Texas | 17.9 |
| First Interstate of Oregon | 17.8 |
| Cullen Bank, Texas | 17.8 |
| Bank of New England (Valuepath) | 17.7 |
| Guardian Ins. (VA 1), N.Y. | 17.2 |
| First of America, Mich. | 17.1 |
| Northern States Trust, Ill. | 16.9 |
| Mellon Equity Associates | 16.8 |
| First Fidelity, N.J. | 16.7 |
| First N.H. Investment (Emp. A) | 16.4 |
| Nat'l Bank of Commerce, Tenn. | 16.4 |
| Mutual of New York (Inc.) | 16.4 |
| First of Omaha (D), Neb. | 16.4 |
| Meridian Trust, Pa. | 16.3 |
| Nationwide Life, Ohio | 16.2 |
| First Alabama Bank (I) | 16.1 |
| Dominion Trust (Corp.), Va. | 16.1 |
| U.S. Nat'l of Galveston, Texas | 16.1 |
| Colorado Nat'l | 16.1 |
| Phoenix Mutual, Conn. | 16.0 |
| Sovran Bank (Inst.), Va. | 16.0 |
| First Chicago | 16.0 |
| Citizens Fidelity (E), Ky. | 15.8 |
| Manufacturers Detroit | 15.7 |
| Provident Nat'l, Pa. | 15.7 |
| First American of Georgia | 15.7 |
| Citytrust (E1), Conn. | 15.6 |
| Frost Nat'l (A), Texas | 15.3 |
| Massachusetts Mutual | 15.5 |
| College Ret. Equities Fund | 15.5 |
| C&S Trust Florida | 15.5 |
| First Union, N.C. | 15.4 |
| Valley Nat'l (I), Ariz. | 15.4 |
| Principal Mutual, Iowa | 15.4 |
| NBD Trust, Ill. | 15.3 |
| John Hancock (1K), Mass. | 15.3 |
| Barnett Banks Trust, Fla. | 15.3 |
| AmeriTrust (Divers.), Ohio | 15.2 |
| LaSalle Nat'l (Intrinsic) Ill. | 15.2 |
| Fidelity Mgmt. (Inc.), Mass. | 15.2 |
| Associated Bank (Neenah), Wis. | 15.2 |
| First Security Nat'l (D), N.Y. | 15.2 |
| First of Maryland | 15.2 |
| Morgan Guaranty (Large co.) | 15.1 |
| Wellington Trust (Divers.), Mass. | 15.0 |
| Signet Trust, Va. | 14.9 |
| Confederation Life, Ontario | 14.9 |
| Sentry Life (SA B), Wis. | 14.9 |
| Bankers Trust (Index), N.Y. | 14.9 |
| Wells Fargo (Index), Calif. | 14.7 |
| Lake Shore Nat'l, Ill. | 14.7 |
| American Nat'l Chicago (S&P) | 14.7 |
| Norstar Trust, N.Y. | 14.7 |
| **Standard & Poor's** | **14.6** |

### 10-year returns

| | % |
|---|---|
| Sun Bank, Fla. | 23.0 |
| Manufacturers Life, Ontario | 21.3 |
| First Fidelity (Disc.), N.J. | 20.5 |
| First Union Bank, N.C. | 20.2 |
| Guardian Ins. (VA 1), N.Y. | 20.2 |
| U.S. Nat'l of Oregon (Qualivest) | 19.8 |
| United of Denver, Colo. | 19.7 |
| The New England (Sep. cap.) | 19.7 |
| First Interstate of Oklahoma | 19.4 |
| Bessemer Trust, N.Y. | 19.2 |
| First of N.H. Investment (Emp. A) | 18.8 |
| Confederation Life, Ontario | 18.8 |
| Provident Nat'l, Pa. | 18.7 |
| Equitable Capital (4), N.Y. | 18.6 |
| MTrust (Growth), Texas | 18.6 |
| First Trust Corp., Colo. | 18.6 |
| U.S. Nat'l of Galveston, Texas | 18.5 |
| First Fidelity, N.J. | 18.4 |
| MTrust (Value), Texas | 18.4 |
| First RepublicBank, Texas | 18.3 |
| Principal Mutual Life, Iowa | 18.2 |
| Lake Shore Nat'l, Ill. | 18.1 |
| First Interstate of Oregon | 18.0 |
| Wheeling Dollar, W. Va. | 18.0 |
| Nat'l Bank of Commerce, Neb. | 17.9 |
| Home Life, N.Y. | 17.9 |
| Manufacturers Detroit | 17.9 |
| First of Omaha (D), Neb. | 17.9 |
| Nationwide Life, Ohio | 17.7 |
| Massachusetts Mutual | 17.7 |
| Mid-State Bancorp, Pa. | 17.7 |
| CoreStates, Pa. | 17.6 |
| Employers Life of Wausau (SA 1) | 17.2 |
| Continental Bancorp, Pa. | 17.2 |
| C&S Trust Florida | 17.2 |
| State Street Bank, Mass. | 17.2 |
| Colorado Nat'l Bank | 17.2 |
| Texas Commerce (Divers.) | 17.2 |
| American Nat'l Chicago (Active) | 17.1 |
| Nat'l City Cleveland | 17.1 |
| Sentry Life (SA B), Wis. | 17.1 |
| Norstar Trust, N.Y. | 17.0 |
| Citizens Chillicothe (Emp. B), Mo. | 17.0 |
| Markston Invest. Mgmt. | 16.9 |
| Citytrust (E1), Conn. | 16.9 |
| Bank of Tokyo, N.Y. | 16.9 |
| Aetna Life, Conn. | 16.9 |
| Sovran Bank (Inst.), Va. | 16.9 |
| Firstier Bank | 16.8 |
| Signet Trust, Va. | 16.8 |
| **Standard & Poor's** | **16.4** |

# Assets moving

*Continued from page 2*

a machinery company. Belgian holdings include **CMB**, a transportation and shipping company.

"The (German) market is not very exciting, but the values are excellent and should one day be recognized," said the July International Investment Commentary of Kemper-Murray Johnstone International Inc., Glasgow, Scotland, which is looking at cheap stocks in many Continental European markets.

As of July 15, the firm had 6.2% in Germany vs. the index's 4.3%. Core holdings include **Siemens**, an electronics company, and **Allianz Aktie**, an insurer.

Kemper-Murray Johnstone is emphasizing small Pacific Basin markets. As of July 15, it had 6.6% in Hong Kong, dwarfing the EAFE index's 1.3%. Holdings are mainly hotels, which fill up with Japanese tourists, and trading companies, which benefit from accelerating trade with China, the publication said. A 7.4% weighting in Australia vs. the EAFE's 2.4% is mainly for the metals play.

Alliance prefers Canadian to Australian mining companies. The firm has slashed Australian holdings to 2% from 6% since the beginning of the year, selling such companies as **CRA Ltd.** and **Western Mining Corp. Holdings Ltd.** during the second quarter.

"We found comparable, more interesting and cheaper mining stocks in Canada," Mr. Breedon said.

In addition, "we've been confident in the U.S. dollar since January. Values in mining look cheap," he said. The firm, which has 13% in Canada, is buying the mining companies **INCO Ltd.** and **Comalco Ltd.**

Japan and the United Kingdom shifted less dramatically in InterSec's median portfolio than small Pacific Basin markets. The yen's weakening against the dollar during the second quarter caused Japan to sink as a percentage of the InterSec median portfolio, falling in U.S. dollar terms to 37.8% as of June 30 from 39.9% as of March 31. Japan's weighting in EAFE dipped to 62.6% from 64.4%.

Japan's disappointing results in the second quarter don't frighten Walter Scott & Partners, Edinburgh, Scotland, which had a near-index weighting of 60% in Japan as of June 30.

Japan needs continued increases in productivity in the manufacture of high-technology electrical components and finished goods to offset shrinkage of the work force from an aging population, according to a Walter Scott report.

"It is in Japan's national interest to maintain and encourage these areas of manufacturing excellence to which we expose our portfolios," the report said, noting the average Japanese autoworker is 10 years older than his U.S. counterpart.

Acadian has 57% to 58% in Japan — far more than the median portfolio, but still below the index weighting. Mr. Frashure said the Japanese market recovered strongly in July after a poor second quarter and the long-term trend is for strong corporate profits and real gross national product growth.

"Local market volatility in (local currency terms) is less in Japan than in the United States, which should mean higher p/es," Mr. Frashure said.

Alliance, however, like many U.S.-based international managers, has long been underweighting Japan. The market has represented only 20% to 25% of Alliance's international portfolios for a year.

As for the United Kingdom, some of the investment managers interviewed have sliced U.K. holdings, although the market's representation in the InterSec median portfolio and EAFE index changed little during the second quarter.

Acadian has only 7% in the United Kingdom because "our tactical asset allocation models have been very sensitive to rising interest rates in the U.K.," Mr. Frashure said.

Alliance cut U.K. exposure to 12.5% from 18% during January and February, Mr. Breedon noted. ■

## Index based on economies

NEW YORK — Morgan Stanley Capital International has introduced an international index weighted according to the size of world economies instead of stock market capitalizations.

Called the MSCI EAFE (GDP) index, it weights countries by their gross domestic product unlike the firm's Europe Australia Far East index, which weights countries by market capitalization.

The major difference in weightings between the two indexes is a reduced weight for Hong Kong, Japan and the United Kingdom and increased weights for most other markets — particularly France, Germany and Italy.

Because of the reduced representation of Japan, the EAFE (GDP) index was up 8.8% during the first seven months of this year vs. EAFE's 12.8% increase for the same period.

EAFE (GDP), like the firm's other indexes, is to be calculated daily. ■

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*Tony Terracciano*
*President and Chief Operating Officer*

**Mellon Bank**

# Fixed income

*Continued from page 1*
tegies the new unit will follow, though he noted it will use domestic and international fixed-income instruments.

"Our intention is to begin to solicit fixed-income separate account business and expand our family of mutual funds offered to institutions," Mr. Shuch said.

Mr. Shuch said the company wants the organization — including portfolio managers and marketing executives — in place before soliciting separate account clients. The process will take until fall to complete.

Along with the separate account venture, he said Goldman will expand its mutual fund business. The company is investment manager for 14 mutual fund portfolios, all money-market funds, except for one intermediate-term government securities fund. Goldman markets its mutual funds to banks and trust departments, which sell them to their institutional clients. One of the funds, totaling $400 million, is offered exclusively through Centerre Trust Co., St. Louis.

Goldman began its mutual funds group in 1981. Mr. Shuch said the expansion will involve creating more fixed-income mutual funds under new strategies, which he declined to identify. The mutual fund business will continue to be based in Chicago and led by Jack Whitman, president. Mr. Shuch also oversees the mutual funds group.

Goldman also serves as administrator for a $2 billion money-market fund of Northern Trust Co., Chicago. Northern Trust manages the investments of that fund.

Although not involved in separate account asset management, Goldman has for many years actively marketed specially tailored portfolio restructuring and trading strategies to pension funds, indicating its expertise in addressing particular investment and asset-liability situations. As such, the company acts as a leading adviser in setting up structured bond portfolios, such as dedications; pension fund restructurings; and sweeping asset allocation moves, such as buying or selling baskets of bonds in program trades.

In these pension services, Goldman often works jointly with pension sponsors and their money management firms. Goldman, working jointly with National Investment Services of America Inc., Milwaukee, in 1984 helped the American Information Technologies Corp. pension fund set up a $2.4 billion dedicated bond portfolio.

Mr. Shuch had headed these activities, though in his current position he is no longer involved. ■

# Scudder U.S. partner in international triad

**Three major money management firms have joined forces to provide global investment management services.**

**The new joint venture, called IBJ Global Investment Management S.A., was formed Aug. 5 in Luxembourg. Tokyo-based IBJ Capital Management Co. Ltd., an affiliate of the Industrial Bank of Japan, owns 60% of the joint venture: Scudder, Stevens & Clark Inc., New York, and Pictet & Co., Geneva, the oldest private bank in Switzerland, each own 20%.**

**Under the joint venture, IBJ is responsible for investments in Japan; Scudder is charged with handling investments in the rest of the Pacific Basin, the U.S. and Canada; and Pictet is responsible for investments in Europe.**

**Earlier this year, Scudder arranged to exchange investment views and trainees with Mitsui Trust & Banking Co. Ltd., Tokyo; the U.S. firm also is running money for a major client of the Japanese bank.**

**Last year, Scudder formed a joint venture with Nippon Kangyo Kakumaru Securities Co. Ltd., Tokyo, under which Scudder provides global investment management services while Nippon Kangyo is responsible for marketing to Japanese investors.**

# Foreigners put

*Continued from page 1*
pick up.

Managers running passive equity products are Wells Fargo Investment Advisors, $765 million; State Street Bank and Trust Co., $647 million; Chase Investors, $120 million; Harris Trust and Savings Bank, $43 million; Alliance Capital, $40 million; Bankers Trust, $23 million; and IDS Advisory Group, $10 million.

In contrast, only Chase Investors reported running passive bond money, with $554 million under management.

- The leading active equity managers were J.P. Morgan, $3.7 billion; Morgan Stanley, $2.1 billion; Citicorp, $2 billion; Alliance Capital, $1.7 billion; and Batterymarch Financial Management, $1.1 billion.
- Morgan dominated the balanced manager category, with $6.8 billion under management. Following were: Citicorp, $4.5 billion; Chase Investors, $752 million; Morgan Stanley, $489 million; and Atlanta Capital Management, $463 million.
- In the fixed-income area, Fischer, Francis led all managers, with $2.2 billion. Following were: Chemical, $1.8 billion; Bankers Trust, $1.4 billion; and Chase Investors and Morgan Stanley, each with $1 billion.
- Richard Ellis led managers with real estate accounts, with $2.7 billion; Chase Investors recorded a strong second with $2.5 billion. Also running U.S. real estate portfolios for foreign investors were: Schroder Real Estate Associates, $825 million; Prudential Asset Management Group, $636 million; J.P. Morgan, $494 million; Equitable Real Estate Investment Management, $256 million; and Citicorp, $150 million.
- Of alternative investment products, The Capital Group Inc. managed $155 million in convertibles, and State Street ran $109 million in futures contracts. Three managers reported running venture capital accounts: Citicorp, with $95 million; INVESCO MIM International Ltd., $40 million; and Prudential, $6 million.
- Several managers reported running sizable cash accounts, including Citicorp, with $720 million; J.P. Morgan, $304 million; Irving Trust Co., $299 million; and Chemical, $291 million.

The survey was based on mailings to more than 650 money managers. It excluded assets invested in U.S. markets by foreign-based investment management organizations, even if they had U.S. subsidiaries. Their responses are listed separately.

In total, 61 managers responded they did have foreign assets under management. Managers were asked to include solely those assets invested in U.S. markets; where they ran global accounts, they were asked to include the target allocation to U.S. markets only.

While all provided total assets under management, a few major institutions did not provide breakdowns from what types of institutions or from which geographic areas accounts came, citing confidentiality. In those cases, *P&I Age* estimated the sources of those accounts.

For most managers, foreign-based business represents only a small portion of their overall asset management business, averaging 5% of total assets under management. Respondents had a total of $1.1 trillion in assets under management worldwide.

Some have developed foreign business into a significant portion of their overall revenues. Michael Fisher, managing director of Bankers Trust Co. — Investment Management Group, said 85% of the unit's revenues come from U.S. sources, but he expects a decrease to 50% by the early 1990s.

Bankers has increased its marketing in London and Tokyo "because of the enormous potential growth in those markets," he said.

Institutions whose foreign business invested in U.S. markets represents more than 20% of assets under management are: Burgess Capital Corp., 78.4%; Richard Ellis, 74.9%; Schroder Real Estate, 63.5%; Citicorp, 59.2%; Atlanta Capital, 34.3%; Travelers Asset Management International, 28.8%; Morgan Stanley, 26.1%; Chase Investors, 22%; and J.P. Morgan, 21%.

Some major institutions that have long-established business abroad have developed markets in a variety of geographic areas and among different kinds of institutions.

Alliance Capital's $2 billion in foreign assets under management in U.S. markets come from institutional investors in Continental Europe, Japan, Australia and the Middle East.

Some officials reported they initially had been hired to run U.S. accounts but their mandate is being expanded to global accounts.

While foreign pension funds primarily are seeking balanced managers, other types of institutional investors — such as sovereign governments, insurance companies and banks — are hiring Citicorp for global accounts instead of U.S.-only accounts, explained Robert Troxler, executive director of Citicorp Investment Management, London.

Investment experts expect the foreign influx to continue as institutions become more sophisticated, and much of that money will flow into the hands of U.S.-based money managers.

Foreign investors seek U.S. managers for investments in U.S. markets because they would know their markets better than foreign-based managers, said Charles H. Salisbury Jr., vice president and director of T. Rowe Price Associates Inc., Baltimore. ■

## Foreign institutional assets managed by U.S. firms in U.S. markets
**($ millions - as of 3/31/88)**

| | Non-U.S. assets | Equity | Fixed | Balanced | Real estate | Other | Total assets |
|---|---|---|---|---|---|---|---|
| J.P. Morgan Investment Mgmt. | 11,468 | 3,574 | 223 | 6,774 | 494 | 304 | 54,741 |
| Citicorp Investment Mgmt. | 7,786 | 2,008 | 311 | 4,582 | 150 | 815 | 13,160 |
| Chase Investors Mgmt. | 4,882 | 555 | 1,631 | 752 | 2,487 | 47 | 22,172 |
| Morgan Stanley Asset Mgmt. | 3,700 | 2,183 | 1,015 | 489 | — | 182 | 14,188 |
| Richard Ellis | 2,700 | — | — | — | 2,700 | — | 3,986 |
| Bankers Trust | 2,647 | 837 | 1,361 | 241 | — | 208 | 79,389 |
| Fischer, Francis, Trees & Watts | 2,200 | — | 2,200 | — | — | — | 12,200 |
| Chemical Investment Group | 2,192 | 80 | 1,841 | — | — | 291 | 14,951 |
| Alliance Capital Mgmt. | 1,995 | 1,895 | 9 | 291 | — | — | 32,332 |
| Prudential Asset Mgmt. | 1,155 | 116 | 301 | 36 | 636 | 6 | 174,700 |
| Batterymarch Financial Mgmt. | 1,132 | 1,132 | — | — | — | — | 8,676 |
| INVESCO MIM Int'l | 1,130 | 600 | 180 | 250 | — | 40 | 30,850 |
| Merrill Lynch Asset Mgmt. | 1,048 | 306 | 262 | 418 | — | — | 81,000 |
| Capital Group | 939 | 771 | 13 | — | — | 155 | 36,298 |
| Manufacturers Hanover Trust | 932 | — | 767 | 165 | — | — | 9,200 |
| State Street Bank and Trust | 912 | 803 | — | — | — | 109 | 32,100 |
| Schroder Real Estate Associates | 825 | — | — | — | 825 | — | 1,300 |
| Wells Fargo Investment Advisors | 765 | 765 | — | — | — | — | 56,030 |
| Scudder, Stevens & Clark | 535 | 44 | 82 | 429 | — | — | 37,000 |
| Atlanta Capital Mgmt. | 508 | 28 | 19 | 463 | — | — | 1,483 |
| First Boston Asset Mgmt. | 484 | 50 | 434 | — | — | — | 4,500 |
| Irving Trust | 427 | 23 | 105 | — | — | 299 | 7,824 |
| Confederation Life | 395 | 395 | — | — | — | — | 9,000 |
| Mitchell Hutchins | 383 | 20 | 260 | 103 | — | — | 38,905 |
| Rosenberg Institutional Equity Mgmt. | 284 | 284 | — | — | — | — | 2,251 |
| Travelers Asset Mgmt. Int'l | 278 | — | 278 | — | — | — | 933 |
| Equitable Real Estate Investment | 256 | — | — | — | 256 | — | 29,553 |
| Fiduciary Trust Co. Int'l | 230 | 2 | 76 | 152 | — | — | 15,500 |
| Templeton Int'l | 208 | 208 | — | — | — | — | 12,485 |
| Roll and Ross Asset Mgmt. | 200 | 150 | 50 | — | — | — | 2,500 |
| Bowey Square Investors | 199 | — | 42 | 157 | — | — | 3,800 |
| BEA Associates | 178 | 86 | 58 | 52 | — | — | 7,495 |
| Burgess Capital | 145 | 145 | — | — | — | — | 185 |
| Miller, Anderson & Sherrerd | 145 | 145 | — | — | — | — | 15,227 |
| IDS Advisory Group | 121 | 87 | 34 | — | — | — | 6,143 |
| Lazard Freres Asset Mgmt. | 100 | 81 | — | 28 | — | — | 9,782 |
| Others | 1,890 | 710 | 145 | 226 | — | 9 | 205,523 |
| TOTAL | 54,561 | 17,971 | 11,129 | 15,618 | 7,558 | 2,385 | 1,084,827 |

# Overseas advisers also eye America

Foreign-domiciled managers are taking a piece of the asset pie of non-U.S. money invested in U.S. markets.

Some of these managers have established subsidiaries in the United States to handle investment management while also marketing to U.S.-based prospective clients for investing overseas.

Their foreign connections give them a leg up in building on existing institutional business.

As of March 31, U.S. subsidiaries of foreign-domiciled money managers with at least $100 million invested in U.S. markets for foreign clients included:

- Nikko & Associates Inc., New York, a subsidiary of Nikko International Capital Management Co. Ltd., Tokyo. The firm ran a total of $920 million for foreign institutional investors, of which $349 million was for Japanese clients.
- G.T. Capital Management Inc., San Francisco, invests $573 million in U.S. markets for foreign clients. Half of the firm's assets came from the United Kingdom, where its parent, G.T. Management PLC, is based.
- Nomura Capital Management Inc., New York, a unit of Nomura Investment Management Co. Ltd., Tokyo, which managed $354 million in U.S. markets, mostly for Japanese clients.
- Daiwa International Capital Management Corp., New York, which invested $212 million on the behalf of foreign clients. Twenty-seven percent of those assets are from Japanese investors. The parent company is Daiwa International Capital Management Co. Ltd., Tokyo.
- Deutsche Bank Capital Management (USA) Corp., New York, a subsidiary of Frankfurt-based Deutsche Bank. The firm invested $176 million in U.S. markets for clients from various locations.
- Warburg Investment Management International Ltd., a unit of Mercury Asset Management Ltd., London. Warburg ran $100 million in U.S. markets. Three-quarters of the firm's assets came from Canada, with the rest coming from Bermuda. ■

9/2/88 C2710-2

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PENSIONS & September 5, 1988

# Investment Age

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# Tactical allocation soars

**Largest tactical asset allocation managers**

| Firm | Amount ($ mils.) |
|---|---|
| Wells Fargo | 9,127 |
| Prudential | 7,100 |
| Mellon Capital | 6,000 |
| First Chicago | 4,500 |
| TSA | 3,000 |
| Boston Co. | 2,300 |
| Renaissance | 1,510 |
| Avatar | 1,300 |
| Citibank | 1,250 |
| Bankers Trust | 1,050 |
| J.P. Morgan | 500 |
| Chase Investors | 300 |
| Ballard Biehl & Kaiser | 200 |
| Matrix | 187 |
| Webster | 50 |
| TOTAL | 38,374 |

Source: *Pensions & Investment Age*

**By Carol Wiley**

Tactical asset allocation managers have $38.374 billion under management in the product, an increase of 41% from last year.

Fifteen managers with a specialty in tactical asset allocation surveyed by *Pensions & Investment Age* reported assets of $27.214 billion last summer. The managers also gained 138 pension fund clients during the 12 months ended Aug. 30, bringing the total number of tactical asset allocation clients to 838.

Tactical asset allocation comprises quantitative and model strategies to make short-term switches among asset classes — traditionally stocks, bonds and cash equivalents, although lately new classes are being added — in an attempt to add value in varying market conditions. Futures or index funds are used to achieve the shifts. Some pension funds use only futures and options overlays to achieve the effect of moving the assets.

Wells Fargo Investment Advisors, San Francisco, reported the most in tactical asset allocation, $9.127 billion, an 86.9% increase from $4.882 billion as of July 31, 1987. The firm added 38 clients during the period, bringing its total to 107.

The firm with the most growth for the year, however, was The Boston Co., Boston, which experienced a 133% gain to $2.3 billion under management from $987 million as of June 30, 1987. The number of clients increased to 25 from 12.

The Boston Co., and tactical asset allocation managers in general, continued to add clients because of the disappointing results of portfolio insurance during the Oct. 19 market crash; the awareness that asset allocation adds value; and the realization that asset allocation is the "single biggest" factor in determining performance, according to Richard Crowell, senior vice president and manager of structured investment products at The Boston Co.

Patricia Dunn, president of Wells Fargo, concurred.

"There's a renewed focus on the importance of the asset class decision and realizing after Oct. 19 that it's the asset class that explains 90% of the return, not the securities themselves," Ms. Dunn said. "That's not to say that it doesn't matter what security you're in; it's a first order, second order thing."

Interest continues to grow because tactical asset allocation now can take on the global markets, according to Gary Brinson, president of First Chicago Investment Advisors, which has offered an asset allocation product since 1981, and now has $4.5 billion under management in the product, up from $3.75 billion July 31, 1987. Clients now number 62, up from 57 last year.

*Continued on page 59*

# Surplus used to pare debt

**By Marcia Parker**

AKRON, Ohio — The Goodyear Tire & Rubber Co., which is in the midst of a comprehensive restructuring campaign, is using $400 million in surplus assets from a terminated retirement plan for salaried employees to pare down $3.6 billion in long-term debt.

Like many companies with excess assets in their pension funds, Goodyear is prompted to move now with the reversion because the federal government's termination policy is in flux. The reversion comes at a time when Congress is wrestling with a long-term termination policy and the thorny question of whether excess assets belong to the sponsor or the beneficiaries. Lawmakers are considering slapping a 60% excise tax on pension plan reversions occurring during the next nine months until a new policy is fashioned (*Pensions & Investment Age*, Aug. 8).

The world's largest tire company has been restructuring its capitalization and businesses since 1986 (*P&I Age*, Aug. 8).

The company was consolidated under two worldwide divisions, tires and general products. The move was designed to result in a more streamlined, flexible and responsive management structure.

In addition, Goodyear has completed a major share repurchase program, sold $1.7 billion of businesses and assets not related to its core businesses of tires and rubber products and related chemical and plastic products, closed non-competitive plants and taken a number of steps to reduce costs. Goodyear's chief financial officer Oren G. Shaffer said debt reduction has been a constant goal and although it has been pared down some, he acknowledged the company is still highly leveraged.

*Continued on page 62*

**INSIDE**

**Treasurers' endorsement — P.21**

# Bechtel pioneers

## New asset categories show way

**By Barry B. Burr**

**SAN FRANCISCO — Bechtel Power Corp. plans to adopt a pioneering global tactical asset allocation strategy for part of its $1.2 billion pension fund and include such alternative asset classes as international securities and newly created indexes of gold-mining stocks and real estate investment trusts.**

**Bechtel hired Bailard Biehl & Kaiser Inc., San Mateo, Calif., to control the portfolio's tactical asset allocation.**

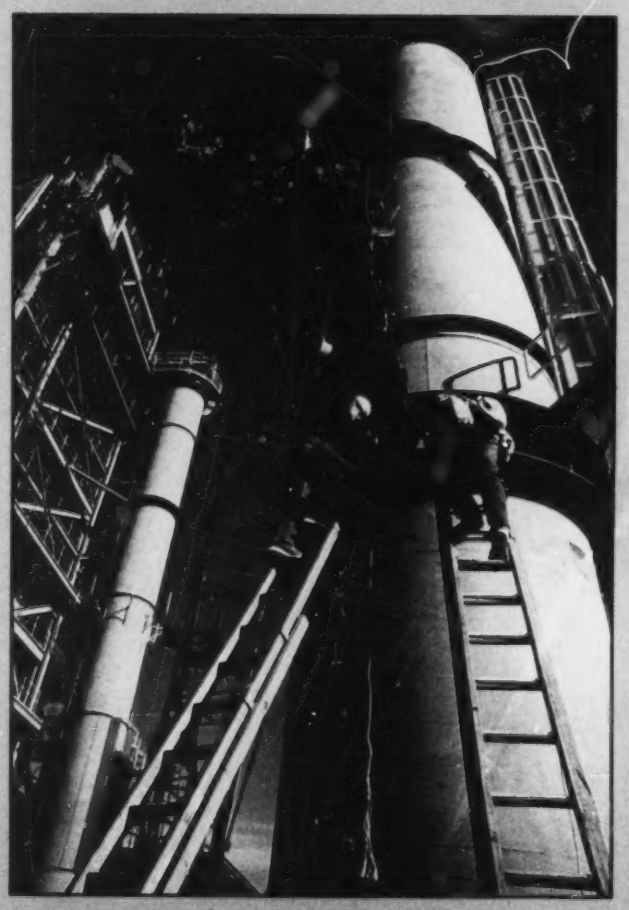
**James E. Rhodes, investment manager at Bechtel, said Bailard Biehl was assigned $25 million for the TAA strategy.**

**"I'm sure if things work out we will allocate more to BBK," Mr. Rhodes added.**

**He expects the fund to begin using Bailard Biehl's TAA model in "the next month or so. We are still working out some details."**

**"This is a global approach to tactical asset allocation,"**

*Continued on page 58*



**Bechtel, part owner of this cogeneration power plant in Bakersfield, Calif., placed $25 million in a global tactical asset allocation strategy with an unusual array of alternatives.**

## LATE NEWS

### Simpson restructuring nets 11

SEATTLE — Simpson Investment Co. added 11 managers and reassigned assets to four existing firms, restructuring its $185 million defined benefit pension fund. One manager was terminated as a result of the changes.

Simpson, the holding company for Simpson Timber Co. and Simpson Paper Co., restructured the plan after asset allocation studies, started in 1987, were completed.

Under the new strategy, 46% of total assets will be in tactical asset allocation programs run by Mellon Capital Management Inc., San Francisco; TSA Capital Management, Los Angeles; The Boston Co. Inc., Boston; and INVESCO Capital Management, Atlanta. TSA and The Boston Co. are new managers. Mellon and INVESCO previously managed equities.

Real estate equity, 12% of the fund, will be managed by J.P. Morgan Investment Management Inc., New York, and Frank Russell Trust Co., Tacoma, Wash., both new managers.

Small-cap stocks, 11% of the fund, will be run by Brandywine Asset Management, Wilmington, Del.; Fisher Investments Inc., Woodside, Calif.; and RCM Capital Management, San Francisco. Brandywine and Fisher are new managers. Large-cap stocks, 10% of the assets, will be managed by RCM, Olympic Capital Management Inc., Seattle, and INVESCO. All three were large-cap managers for the fund.

International equities, 8% of the asset mix, will be managed by Schroder Capital Management International, New York, and PCM International, Newark, N.J. Both are new managers. Special situations, 7%, will be managed by new manager Hellman & Friedman, San Francisco.

Fixed income, 6% of the fund, will be run by Dimensional Fund Advisors, Santa Monica, Calif., and Neuberger and Berman, New York. Both are new firms.

Mark Duvall, financial analyst at Simpson, declined to release the amounts allocated to each manager as well as the name of the released balanced manager. The 1988 Money Market Directory lists Columbia Management Co., Portland, Ore., as the fund's only other balanced manager.

Wurts, Johnson & Co., Seattle, assisted in the searches.

### Baer acquires share of Harbor

BOSTON — Baer Holding Ltd. of Zurich, Switzerland, has acquired a 15% interest in Harbor Capital Management Co. Inc., Boston. Terms of the deal could not be learned by press time.

Harbor Capital manages $1.6 billion, of which $1.2 billion is for tax-exempt clients. Baer Holding is the parent of Julius Baer Investment Management Inc., New York, which manages $750 million in tax-exempt assets.

### Leasing volume rose during '87

ARLINGTON, Va. — The volume of new business for equipment leasing companies increased in 1987 to $33 billion from $24 billion the previous year, a survey by the American Association of Equipment Lessors shows.

Total leasing volume in 1987 is estimated between $90 billion and $95 billion, compared with the 1986 figure of between $80 billion and $85 billion.

The survey noted there was less growth in leveraged leasing because of the lower tax rate and loss of some tax credits.

### Funds report manager changes

•AMHERST, Ohio — The Nordson Corp. pension fund and Nordson Foundation have restructured their investments, reallocating about $60 million and hiring four managers, said Raymond L. Cushing, corporate cash manager.

Hired were Disciplined Investment Advisors Inc., Evanston, Ill., and National City Bank of Cleveland, for equities: Patterson Capital Corp., Los Angeles, for fixed income, and Avatar Associates, New York, for tactical asset allocation. Mr. Cushing declined to state the allocation to each manager and the total assets of either fund, but said funding came from a balanced account with the Beachwood, Ohio, office of Alliance Capital Management Corp. DeMarche Associates, Kansas City, Mo., did an allocation study for the fund.

• BRONXVILLE, N.Y. — Sarah Lawrence College, with $11 million in its endowment fund, hired two managers for a total of $4.5 million, said David Klein, director of finance and controller.

The college hired The Common Fund, Fairfield, Conn., to manage $2.5 million in a South Africa-free bond fund, and Avatar Associates, New York, to run $2 million in tactical asset allocation between equities and cash. The assets had been run in a balanced account by Auchincloss & Lawrence Inc., New York.

• LOS ANGELES — The $4 million Dawson Co. pension and profit-sharing funds hired Cullen Fortier Asset Management, Woodland Hills, Calif., for a balanced account, replacing Harold Davidson & Associates, Los Angeles, said Bob Uchimura, controller.

## DEPARTMENTS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Vol. 16, No. 19 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1988.

# Big play, small stocks

## Wisconsin's 5% holdings

By Barry B. Burr

MADISON, Wis. — The State of Wisconsin Investment Board is buying big pieces of small stocks: large enough chunks to require what's becoming a steady stream of 13(d) filings with the Securities and Exchange Commission.

In the first 22 days of August alone, the internally managed, $15.6 billion pension fund made filings with the SEC to disclose holdings of 5% or more in 11 companies.

The 11 companies comprise almost 10% of the market value of the fund's $1 billion small-capitalization stock portfolio.

Buying such relatively large holdings resembles an investment posture of the $16.1 billion Michigan State Employees' Retirement Systems, Lansing. The Michigan fund often holds more than 5% of a stock.

Commenting on taking the large positions, Kevin A. Schmitting, assistant investment director of the Wisconsin board, said, "We do that frequently because of size considerations of some of these small companies."

Mr. Schmitting estimated the board has 25 to 30 filings outstanding. But the filings for August indicate the number possibly is higher. Mr. Schmitting declined to discuss strategy or release any details about the recent filings and the exact number of such large holdings in the portfolio.

Investors must file 13(d) statements with the SEC when their ownership reaches at least 5%. The filing also indicates whether the investor might seek to exert influence in the management or policy of the company.

Only stocks of $500 million and less in market capitalization are eligible for the Wisconsin fund's small-stock portfolio, Mr.

*Continued on page 5*

**The Wisconsin Investment Board has a habit of buying large holdings of small stocks, such as Toro Co. In the first 22 days of August, the fund revealed holdings of 5% or more in 11 companies.**

## Earnings, pension cost tied

**NEW YORK — Almost half of the annual rate of gain in pre-tax earnings reported by companies in the Standard & Poor's 500 stock index in 1982-'87 came from a $15 billion decline in annual pension expense during the period.**

**While reported pre-tax profits of the S&P 500 companies grew at a 4.8% annual rate during the 1982-'87 period, 44% of that annual gain came from the reduction in annual pension expense, according to an analysis by George H. Boyd III, a security analyst at Kidder Peabody & Co. Inc.**

**"The decline in pension expenses charged to the income statement has been an important ingredient in supporting reported earnings over the past five years," Mr. Boyd said.**

**"Pension expenses represented 18.1% of pre-tax profits of the S&P 500 in 1982. Subsequently, the appreciation in the market, which has positively affected pension portfolios, and the implementation of FASB 87, have contributed to a sharp reduction in the pension expenses of the majority of corporations."**

**In addition, Mr. Boyd said,**

***Continued on page 58***

# Venture cap matching '87

By Trudy Ring

Pension funds committed the same amount to venture capital during the first six months of 1988 as in the first half of 1987, despite concerns the Oct. 19 stock market crash would dampen investors' enthusiasm for venture deals.

Commitments to private, independent venture capital partnerships totaled $1.372 billion for the first half of 1988, almost exactly the same as 1987's first-half total of $1.374 billion, according to Venture Economics Inc., Wellesley Hills, Mass. Pension funds' share of the commitments was about 48% in both periods. For all of 1987, commitments totaled a record $4.2 billion, with pension funds contributing 39%.

"The thing we were all wondering about is if we would see any pullback as a result of Oct. 19," said Linda Vincent, vice president of Venture Economics. Immediately after the crash, there was concern the resulting tightening of the initial public offering market and increased investor conservatism would discourage venture capital investment.

But at Venture Economics' annual industry conference, held 10 days after the stock market plunge, participants said the phenomenon made diversification more important than ever and pointed out venture capital has a low correlation to the public equity market, Ms. Vincent said. In light of that, she's not surprised by the first-half numbers.

Other consultants agreed. "I would be surprised if there was a really big jump," said Doug Patejunas, consulting manager at Ennis, Knupp & Associates Inc., Chicago. "But, I wouldn't think there would be a reaction to pull back just from that single event."

"If there is any of that (conservatism) there's going to be an increased emphasis on diversifying," said Doug Le Bon, vice president-special investments division at Wilshire Associates, Santa Monica, Calif.

Venture Economics' data did indicate public pension funds' share of venture capital commitments increased while corporate funds' share decreased. Public funds generally are newer to venture investing and still working toward their target levels, while many corporate funds have reached the targets, Ms. Vincent said.

Public funds committed $280 million during the first half of 1988, up from $184 million during the same period of 1987, according to Venture Economics. Corporate and other private pension funds committed $382 million during this year's first half, down from $467 million for the first six months of 1987.

One public fund that made its first venture capital commitment during the first half of 1988 was the $500 million Seattle City Employees' Retirement System, which earmarked $6 million for

*Continued on page 58*

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# Penney sets up leveraged ESOP

**By Fred Williams**

DALLAS — J.C. Penney Co. has replaced its 50-year-old employee savings and profit-sharing plan with a $700 million leveraged employee stock ownership plan and will use the proceeds of its loan to purchase up to 9% of the company's outstanding common stock in an effort to bolster its stock price.

The company will redirect its annual contribution from the savings plan to the LESOP. The 1987 contribution was $50 million.

According to Harvey McCormick, manager of corporate relations at J.C. Penney, the savings plan will be suspended and the $1.6 billion in assets will continue to be credited and accrue in existing employee accounts. The new plan will be a follow-on plan effective at year end, he said.

The company's defined benefit plan, with assets of $1.7 billion, is not affected by the change.

Under the terms of the J.C. Penney program, the LESOP trust borrowed $700 million from a group of insurance companies at an interest rate of 8.17% for 10 years.

The LESOP used the proceeds of the loan to purchase a new issue of convertible preferred stock from the company. The preferred stock is convertible into approximately 11.8 million shares of J.C. Penney common stock, about 9% of the current outstanding shares. The existing savings plan owns about 15% of the company's common stock, said Mr. McCormick. The dividend yield on the preferred stock is 7.9% compared with approximately 4% on the company's common stock. The conversion price is set at $60 per share. The common stock was trading at $46.25 as of the end of August.

Under the old saving plan, the company offered three investment options to employees: company stock, fixed income or common stock. The company contribution was in common stock. In the new plan, the same options exist, but J.C. Penney now will contribute preferred stock, Mr. McCormick said.

As part of the program, the J.C. Penney board of directors authorized the company to use the proceeds from the issuance of preferred stock to purchase up to 15 million shares of common stock as part of an expanded stock buyback program undertaken by the company in 1987. The company is purchasing up to 20 million shares on the open market. As of July 30, the company had purchased 19.1 million shares.

According to a statement from William R. Howell, chairman of the board, J.C. Penney is attempting to improve its operating performance.

He said the combined LESOP and stock repurchase program is expected to increase cash flow, earnings per share and return on equity "as well as provide our associates (employee participants) with a more attractive benefit plan." ■

## CORRECTIONS & CLARIFICATIONS

• The **Pension Benefit Guaranty Corp.** performs its statistical analysis based on termination lists it provides to Congress and not on a separate list of statistics, according to Richard Ippolito, chief economist for the PBGC.

Data provided to Congress, however, list terminations according to the date the pension plans filed for termination. The PBGC figures its statistics according to the date the termination was completed, which is why differences can occur, Mr. Ippolito said.

An incorrect statement by a PBGC spokesperson that the data supplied to Congress was inaccurate led *Pensions & Investment Age* to report in the July 25 issue that the PBGC kept two sets of data, one for Congress and one from which it derived its statistics.

• The projected benefit obligation of **Navistar International Corp.** was $2.4 billion as of Jan. 1, 1987. An incorrect figure was cited in the chart of the top 100 corporate pension funds that appeared in the July 25 issue.

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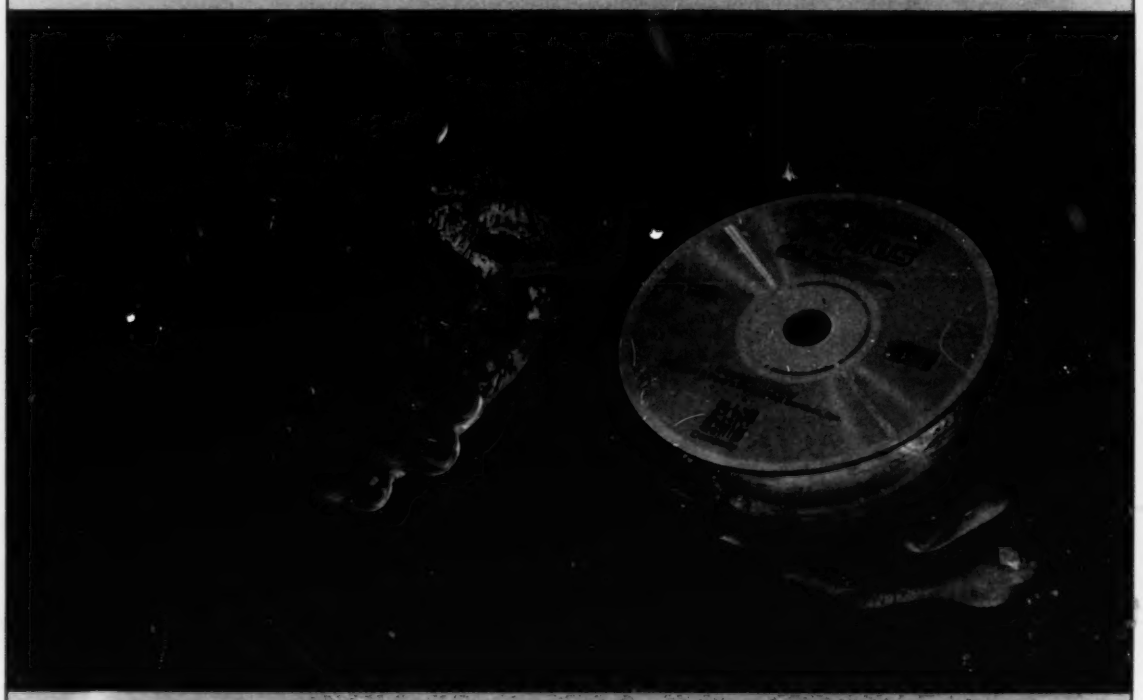

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PIPER

# Tapping takeovers

## 2nd-quarter leaders find stocks in play

**By Curtis Vosti**

Takeover stocks once again played a prominent role in bank and insurance company commingled special equity funds that were the top performers in the Pensions & Investments' Performance Evaluation Report for periods ended June 30.

Overall, special equity fund performance lagged that of the first quarter, and many fund managers reported increased cash positions as the third quarter began.

The median performance of PIPER's universe of 109 special equity funds returned 6.6% for the second quarter, compared with a 12.2% median performance for a PIPER universe of 106 funds in the first quarter.

The $5 million, 3-year-old special equity fund of First City Texas, formerly First City National Bank of Houston, topped the PIPER special equity category for the quarter, returning 15.6%. The Standard & Poor's 500 stock index returned 6.7% for the quarter, while the Russell 2000 index returned 7%.

The First City Texas fund also placed third for the year, with a return of 24.6%. For the same period, the PIPER median was −2.4%, the S&P 500 returned −6.9% and the Russell 2000 returned −6.5%.

Ted Davis, First City's senior vice president and chief investment officer, said the bank looks for stocks based on pure earnings and price momentum. "People use it for timing," he said. "We usually nail down profits pretty quickly."

The fund's investment managers wait for a temporary fall in a stock's price as other investors take initial profits — then pounce on the stock.

"You always get a second chance," Mr. Davis said.

Recent buys include **First Executive Corp.**, **MCI Communications Corp.** and **Farmers Group Inc.**

Mr. Davis said the fund had some luck with takeover stocks, including **Intermedics Inc.** and **Armtek Corp.**

Going into September, Mr. Davis said, the fund is 40% in cash. "It didn't look like anything was appropriate to buy."

The Supplemental Equity Fund of Connecticut National Bank, Hartford, finished second, as it did for the previous quarter, with 13.6%. The fund was the only one to finish among the top five for both quarters this year.

"For a long time, it's been a stock pickers market," said Peter Larson, Connecticut National's vice president.

He said the fund is a bit cautious, even defensive, as it entered the third quarter and recently bought insurance stocks such as **Provident Life and Accident Insurance Co. of America** and **20th Century Industries.** The fund's 6% cash position, while not a high level, reflects an uncertainty about the third quarter, Mr. Larson said.

The fund concentrates on finding cheap stocks that have value potential, he said.

Some of the better second-quarter performers include **Software Publishing Corp., Intermedics Inc.** and **Vanguard Technologies Inc.** The latter two were long-term holdings that were bought out during the second quarter.

First Wisconsin Asset Management, Milwaukee, a subsidiary of First Wisconsin Trust Co., ranked third for the second quarter with a 12.3% return on its Emerging Growth fund.

Joe Docter, assistant vice president, said the fund has $11.4 million invested, with 24 stocks in the portfolio at all times.

The fund's managers target stocks of relatively new companies that have a growth rate one-half to two-thirds of the price-to-earnings ratio and usually sell the securities when they reach 100%, he said.

The fund has recently sold some of its holdings, including **Juno Lighting Inc.** and **Mayfair Super Markets Inc.** A strong performer has been **A.M. Castle**, while buys include **Helen of Troy Corp.**

**Special equity funds**
**(periods ended June 30, 1988)**

| | 1st qtr. | 1 yr. | 3 yr. | 5 yr. | 10 yr. |
|---|---|---|---|---|---|
| Highest return | 15.6% | 29 % | 50.9% | 38.8% | 25.7% |
| First quartile | 8.5 | 3 | 18.2 | 12.5 | 19.1 |
| Median | 6.6 | −2.4 | 14.3 | 8.7 | 17 |
| Third quartile | 4.6 | −7.3 | 10 | 4.6 | 15.4 |
| Lowest return | 0.5 | −21.3 | 0.2 | −3.1 | 11.6 |
| S&P 500 | 6.7 | −6.9 | 16.6 | 14.6 | 16.4 |
| Russell 2000 | 7 | −6.5 | 10.5 | 6.2 | NA |

For the longer periods, the Select Equity Fund offered by NCNB Texas National Bank, formerly FirstRepublic Bank, Dallas, continued to top the list, with returns of 29% for the one-year period and annualized returns of 50.9% and 38.8% for the three- and five-year periods.

The top listings are due in part to returns of 69.5% in 1987 and

*Continued on page 15*

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## Top quartile commingled special equity funds

### 3-month returns

| | % |
|---|---|
| First City Nat'l Houston (G-1) | 15.6 |
| Connecticut Nat'l Bank (Sup.) | 13.9 |
| First Wis. Asset (Emerg. gro.) | 12.3 |
| Merchants Nat'l, Pa. | 12.2 |
| Centerre Trust (Coll. P-1), Mo. | 10.8 |
| Texas Commerce | 10.7 |
| Norwest Bank (Sp. invt.), Minn. | 10.6 |
| Ameritrust (Tech.), Ohio | 10.5 |
| Morgan Guaranty (Sup. opp.) | 10.4 |
| Fidelity Mgmt. Trust (Small gro.) | 1.4 |
| First Pennsylvania Bank | 10.0 |
| Society Nat'l (Central value), Ohio | 9.9 |
| EF Hutton (5), Del. | 9.9 |
| Fidelity Mgmt. Trust (Agg.), Mass. | 9.8 |
| CIGNA (Emerg. gro.), Conn. | 9.6 |
| Assoc. Bank Neenah (Cap.appre.) | 9.2 |
| California First Bank (Sup.) | 9.1 |
| First Tennessee Memphis | 8.8 |
| Chase Manhattan (Value), N.Y. | 8.8 |
| Second Nat'l (Emp. gro.), Ohio | 8.7 |
| Ameritrust (Growth), Ohio | 8.7 |
| Lincoln Nat'l (Emerg.), Ind. | 8.6 |
| Old Second Nat'l (HR 10), Ill. | 8.5 |
| **Russell 2000** | **7.0** |
| **Standard & Poor's** | **6.7** |

### 1-year returns

| | % |
|---|---|
| First RepublicBank (Select) | 29.0 |
| Lincoln Nat'l (Emerg.), Ind. | 27.3 |
| First City Nat'l Houston (G-1) | 24.6 |
| EF Hutton (5), Del. | 12.6 |
| Society Nat'l (Central value), Ohio | 11.9 |
| First Wis. Asset (Emerg. gro.) | 11.6 |
| Connecticut Nat'l Bank (Supp.) | 11.5 |
| Assoc. Bank Neenah (Cap.appre.) | 10.3 |
| Liberty Nat'l (Growth), Ky. | 9.4 |
| Morgan Guaranty (Sup. opp.), N.Y. | 9.0 |
| First Chicago (Inst.) | 8.6 |
| First Trust, Minn. | 8.3 |
| First of Minneapolis (20) | 7.3 |
| First Wis. Asset (Growth) | 6.9 |
| Equitable Capital (Tangible asset) | 6.6 |
| Crestar Bank | 5.3 |
| Provident Capital, Pa. | 4.8 |
| Fidelity Mgmt. (Small gro.), Mass. | 4.8 |
| First Interstate Arizona (Personal) | 4.2 |
| Society Nat'l (Ohio reg.), Ohio | 3.7 |
| LaSalle Nat'l (Small cap.), Ill. | 3.5 |
| Centerre Trust (P-1), Mo. | 3.3 |
| First Wachovia (Div. sp. value) | 3.2 |
| **Standard & Poor's** | **6.9** |
| **Russell 2000** | **6.5** |

### 3-year returns

| | % |
|---|---|
| First RepublicBank (Select) | 50.9 |
| EF Hutton (Emerg. B), Del. | 40.8 |
| EF Hutton (Growth B), Del. | 36.2 |
| Assoc. Bank Neenah (Reg.), Wis. | 23.7 |
| Equitable Capital (Tangible asset) | 23.4 |
| First City Nat'l Houston (G-1) | 22.5 |
| Central Fidelity (Agg.), Va. | 21.8 |
| Society Nat'l (Ohio reg.), Ohio | 21.0 |
| Society Nat'l (Central value), Ohio | 20.9 |
| Connecticut Nat'l Bank (Sup.) | 20.7 |
| Fidelity Mgmt. (Agg.), Mass. | 20.4 |
| EF Hutton (5), Del. | 20.4 |
| Security Pacific (Growth G), Calif. | 20.4 |
| California First Bank (Supp.) | 20.3 |
| Norwest Bank (Sp. invt.), Minn. | 19.8 |
| Putnam Fiduciary (Putnam gro.) | 19.6 |
| Harris Trust (Sp. cap.), Ill. | 19.3 |
| Chase Manhattan (Inter. cap.) | 18.5 |
| Morgan Guaranty (Sup. opp.) | 18.3 |
| First Trust, Minn. | 18.2 |
| First of Minneapolis (20) | 18.2 |
| **Standard & Poor's** | **16.6** |
| **Russell 2000** | **10.5** |

### 5-year returns

| | % |
|---|---|
| First RepublicBank (Select) | 38.8 |
| Equitable Capital (Tangible asset) | 18.4 |
| Union Labor Life (SA A), D.C. | 16.7 |
| Fidelity Mgmt. (Agg.), Mass. | 16.3 |
| Society Nat'l (Ohio reg.), Ohio | 16.2 |
| First of Minneapolis (20) | 15.6 |
| Assoc. Bank Neenah (Inc.), Wis. | 15.2 |
| **Standard & Poor's** | **14.6** |
| Citicorp (Real estate), N.Y. | 14.0 |
| LaSalle Nat'l (Small cap.), Ill. | 13.8 |
| First Wachovia (Div. sp. value) | 13.6 |
| First Wis. Asset (Growth) | 13.0 |
| Morgan Guaranty (Supp. opp.) | 12.9 |
| Trust Co. of the West, Calif. | 12.6 |
| First Trust, Minn. | 12.6 |
| Melion Equity Assoc. | 12.5 |
| Old Second Nat'l (HR 10), Ill. | 12.5 |
| Oregon Bank (Agg. gro.) | 12.5 |
| **Russell 2000** | **6.2** |

### 10-year returns

| | % |
|---|---|
| California First Bank (Sup.) | 25.7 |
| MTrust (Growth), Texas | 22.3 |
| Norwest Bank (Sp. invt.), Minn. | 21.9 |
| Connecticut Bank (Emp. sup.) | 20.6 |
| Bank of America (Cit.), Calif. | 20.2 |
| Chase Manhattan (Inter. cap.) | 20.1 |
| Citicorp (Sp. value), N.Y. | 20.0 |
| Union Labor Life (SA A), D.C. | 19.3 |
| **Standard & Poor's** | **16.4** |

## Commingled International

### 3-month returns

| | % |
|---|---|
| PCM Int'l (Global yield), N.J. | 4.0 |
| Principal Mutual (Stock SA), Iowa | 2.7 |
| CIGNA (Eq.), Conn. | 1.8 |
| Provident Capital (Low p/e), Pa. | 1.1 |
| PCM Int'l (Print eq.), N.J. | 0.8 |
| **MSCI World Index** | **1.0** |
| Wells Fargo (Eq.), Calif. | 1.2 |
| First Chicago (Eq.), Ill. | 1.2 |
| California First (Invt. eq.) | 1.2 |
| Wellington Trust (Stock), Mass. | 1.2 |
| Bankers Trust (Eq.), N.Y. | 1.3 |
| PCM Int'l (Global bond), N.J. | 1.6 |
| Confederation Life (Stock), Ga. | 2.1 |
| Putnam Fiduciary (Trust) | 2.2 |
| Chase Manhattan (Global eq.) | 2.3 |
| Fidelity Mgmt (Overseas eq.) | 2.5 |
| First Chicago (Non-$ fixed) | 2.6 |
| Morgan Guaranty (Eq.), N.Y. | 2.7 |
| Marine Midland (Eq.), N.Y. | 2.9 |
| Chase Investors (EAFE index) | 3.0 |
| IDS Trust (Coll. eq.), Minn. | 3.0 |
| IAA Trust (CTF-I), Ill. | 3.3 |
| Morgan Guaranty (Bond), N.Y. | 3.4 |
| Prudential (Foreign stock), N.J. | 3.9 |
| Travelers (Index), Conn. | 3.9 |
| Bessemer Trust (E), N.Y. | 4.0 |
| American Nat'l Chicago (Eq.) | 4.2 |
| Centerre Trust (Coll. W), Mo. | 4.2 |
| Equitable Capital (Port. 20), N.Y. | 4.3 |
| **MSCI EAFE Index** | **4.3** |
| State Street Bank (Index), Mass. | 4.4 |
| Wellington Trust (Pacific Basin) | 4.6 |
| Aetna (AMAM-eq.) | 4.9 |
| Harris Trust (Eq.), Ill. | 5.4 |
| Toledo Trust (Eq.), Ohio | 5.8 |
| Citicorp (Eq.), N.Y. | 5.9 |
| PCM Int'l (Foreign bond), N.J. | 6.3 |
| Citicorp (Fixed), N.Y. | 7.5 |
| First RepublicBank (Stock) | 8.6 |
| Toledo Trust (Global bond), Ohio | 9.0 |

Investment management consultants will be profiled Oct. 17.

### 1-year returns

| | % |
|---|---|
| PCM Int'l (Global bond), N.J. | 20.3 |
| PCM Int'l (Global yield), N.J. | 19.9 |
| First Chicago (Non-$ fixed) | 17.6 |
| PCM Int'l (Foreign bond), N.J. | 14.8 |
| Morgan Guaranty (Bond), N.Y. | 11.5 |
| Provident Capital (Low p/e), Pa. | 9.1 |
| Wells Fargo (Eq.), Calif. | 8.4 |
| Wellington Trust (Pacific Basin) | 8.4 |
| Toledo Trust (Global bond), Ohio | 7.1 |
| Confederation Life (Stock), Ga. | 5.9 |
| Prudential (Foreign stock), N.J. | 5.1 |
| Chase Investors (EAFE index) | 5.0 |
| Travelers (Index), Conn. | 4.9 |
| California First Bank (Invt. eq.) | 4.8 |
| **MSCI EAFE Index** | **4.3** |
| State Street Bank (Index), Mass. | 4.3 |
| American Nat'l Chicago (Eq.) | 3.8 |
| CIGNA (Eq.), Conn. | 2.8 |
| Citicorp (Fixed), N.Y. | 1.2 |
| First Chicago (Eq.) | 0.4 |
| Bankers Trust (Eq.), N.Y. | 0.0 |
| Equitable Capital (Port. 20), N.Y. | 0.6 |
| **MSCI World Index** | **0.7** |
| Harris Trust (Eq.), Ill. | 1.3 |
| Aetna (AMAM-eq.) | 2.5 |
| Chase Manhattan (Global eq.) | 2.6 |
| Wellington Trust (Stock), Mass. | 3.2 |
| Centerre Trust (Coll. W), Mo. | 3.9 |
| Principal Mutual (Stock SA), Iowa | 3.9 |
| Putnam Fiduciary (Trust) | 4.9 |
| Morgan Guaranty (Eq.), N.Y. | 5.1 |
| Bessemer Trust (E), N.Y. | 6.7 |
| Citicorp (Eq.), N.Y. | 7.4 |
| PCM Int'l (Print eq.), N.J. | 7.6 |
| Marine Midland (Eq.), N.Y. | 9.4 |
| First RepublicBank (Stock) | 10.4 |
| IDS Trust (Coll. eq.), Minn. | 11.5 |
| Toledo Trust (Eq.), Ohio | 11.8 |
| Fidelity Mgmt. (Overseas eq.) | 13.4 |

### 3-year returns

| | % |
|---|---|
| Wells Fargo (Eq.), Calif. | 47.2 |
| American Nat'l Chicago (Eq.) | 47.0 |
| **MSCI EAFE Index** | **46.4** |
| Wellington Trust (Pacific Basin) | 46.2 |
| State Street Bank (Index), Mass. | 46.1 |
| Prudential (Foreign stock), N.J. | 45.3 |
| Provident Capital (Low p/e), Pa. | 44.8 |
| Bessemer Trust (E), N.Y. | 42.9 |
| Fidelity Mgmt. (Overseas eq.) | 41.4 |
| Chase Manhattan (Global eq.) | 41.4 |
| Bankers Trust (Eq.), N.Y. | 41.0 |
| Marine Midland (Eq.), N.Y. | 40.6 |
| First Chicago (Eq.) | 40.5 |
| CIGNA Corp. (Eq.), Conn. | 39.5 |


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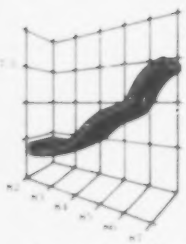

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# Takeovers

*Continued from page 13*

-- 70% in 1986. In the second quarter, the fund returned 4.8%, lagging the S&P and Russell and placing it in the eighth decile of the PIPER universe.

For the year, the median PIPER fund returned -- 2.4%, while the S&P returned -- 6.9% and the Russell 2000, -- 6.5%.

For the three-year period, the PIPER median fund returned 14.3%, while the S&P 500 returned 16.6% and the Russell 2000, 10.5%.

The median PIPER fund for the five-year period returned 8.7%; the S&P 500, 14.6%; and the Russell 2000, 6.2%.

The Emerging Growth fund of Lincoln National Pension Insurance Co., Fort Wayne, Ind., returned 27.3% for the year.

For the quarter, the fund returned 8.6%, placing it in PIPER's third decile and topping the S&P 500 and the Russell 2000.

The fund is managed by Charles Bridges, vice president at Capital Technology Inc., Charlotte, N.C.

According to Robb Rowe, president at Capital Technology, the fund is invested in very small companies with good earnings growth during the past quarter, year and three years, and low p/e multiples.

Buys within the last six months include **AAR Corp.**, **Hexcel Corp.**, **First Hawaiian Inc.** and **Applied Magnetics Corp.**

Funds managed by Shearson Lehman Hutton Asset Management for Shearson Lehman Hutton Trust Co., New York, ranked second and third for the three-year period.

The Emerging Growth fund, since renamed "new values," placed second with its return of 40.8%, while the growth fund finished third with 36.2%.

The Emerging Growth fund has a bias toward relatively modest p/e multiples, with interest in cash earnings momentum, according to David Hillson, senior vice president.

Holdings include **Salick Health Care Inc.**, **American Software Inc.**, **Evans & Sutherland Computer Corp.**, **Career Com Corp.** and **Charming Shoppes Inc.**

"The sell decision is generally a product of the stock having hit a reasonable target for appreciation," he said.

Shearson Lehman Hutton's Growth Fund looks for high-quality, blue-chip stocks, according to Steven A. Kroll, president of the the asset management firm.

He said the fund's core holdings, such as **ITT Corp.**, **Southwestern Bell Corp.**, **General Mills Inc.** and **Bally Manufacturing Corp.**, are "defensive in nature."

The fund recently took profits on cyclical stocks such as **Dow Chemical Co.**, **General Motors Corp.**, **May Department Stores Co.** and **Boeing Co.**

The tangible asset fund offered by Equitable Capital Management Corp., New York, finished second for the five-year period with a 18.4% return. Next was the separate account of Union Labor Life Insurance Co., Washington, with 16.7%.

For the ten-year period, the supplemetal equity fund of California First Bank, San Francisco, was first with an annualized 25.7% return. For the same period, the PIPER median return was 17%, while the S&P 500 returned 16.4%. ■

| | |
|---|---|
| Centerre Trust (Coll. W), Mo. | 38.5 |
| Citicorp (Eq.), N.Y. | 38.2 |
| Aetna (AMAM-eq.) | 37.9 |
| Wellington Trust (Stock), Mass. | 36.0 |
| California First Bank (Invt.-eq.) | 35.9 |
| Morgan Guaranty (Eq.), N.Y. | 35.6 |
| IDS Trust (Coll. eq.), Minn. | 35.5 |
| First RepublicBank (Stock) | 35.5 |
| Putnam Fiduciary (Trust) | 33.6 |
| PCM Int'l (Global bond), N.J. | 32.3 |
| First Chicago (Non-$ fixed) | 32.2 |
| PCM Int'l (Foreign bond), N.J. | 31.0 |
| **MSCI World Index** | **30.7** |
| Morgan Guaranty (Bond) | 26.4 |
| Citicorp (Fixed), N.Y. | 26.0 |
| Toledo Trust (Global bond), Ohio | 24.3 |
| Toledo Trust (Eq.), Ohio | 22.9 |

**5-year returns**

| | % |
|---|---|
| Wells Fargo (Eq.), Calif. | 34.2 |
| **MSCI EAFE Index** | **34.1** |
| American Nat'l Chicago (Eq.) | 33.5 |
| Wellington Trust (Pacific Basin) | 32.3 |
| Bankers Trust (Eq.), N.Y. | 30.1 |
| Marine Midland (Eq.), N.Y. | 28.1 |
| First Chicago (Eq.) | 28.1 |
| Aetna (AMAM-eq.) | 26.6 |
| Wellington Trust (Stock), Mass. | 25.8 |
| Putnam Fiduciary (Trust) | 25.8 |
| Citicorp (Eq.), N.Y. | 25.6 |
| IDS Trust (Eq.), Minn. | 25.3 |
| Centerre Trust (Coll. W), Mo. | 24.9 |
| Bessemer Trust (E), N.Y. | 24.4 |
| PCM Int'l (Global bond), N.J. | 24.4 |
| **MSCI World Index** | **23.5** |
| First RepublicBank (Stock) | 22.9 |
| Chase Manhattan (Global eq.) | 22.5 |
| Morgan Guaranty (Eq.), N.Y. | 22.2 |
| PCM Int'l (Foreign bond), N.J. | 20.6 |
| First Chicago (Non-$ fixed) | 20.6 |
| Morgan Guaranty (Bond), N.Y. | 18.3 |
| Citicorp (Fixed), N.Y. | 16.4 |

**10-year returns**

| | % |
|---|---|
| **MSCI EAFE Index** | **22.1** |
| First Chicago (Eq.) | 19.7 |
| **MSCI World Index** | **19.1** |
| Morgan Guaranty (Eq.), N.Y. | 18.1 |

# Unit trusts cite $1.4 billion gain

WASHINGTON -- Unit investment trusts increased their assets through share offerings in June of $1.4 billion for a year-to-date total of $7.3 billion, according to the Investment Company Institute, the trade association of the mutual fund industry.

A unit investment trust is a fixed portfolio of investments, usually bonds although stocks can be included. The investor purchases an interest in the trust. Securities are held until the trust expires, which can be up to 30 years. Investors receive a pro rata share of the interest or dividends paid.

Tax-free debt trusts issued shares in June with deposits of $775.1 million for a year-to-date total of $4.1 billion. Issues of taxable debt trusts totaled $317.6 million in June for a 1988 year-to-date total of $1.8 billion, and issues of equity trusts totaled $338.6 million for $1.5 billion as of June 30.

There were 138 new tax-free debt trusts issuing shares in June, 16 new taxable debt trusts, and six new stock trusts.

Issues of long-term trusts -- with an average weighted maturity of more than 15 years -- were the most commonly offered in June, with $784.2 million in shareholder deposits. ■


The Value of Ownership

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PIPER

# Bond fund leads in quarter

By Carol Wiley

PCM International, Newark, N.J., had the winning formula for its global bond funds, ranking No. 1 for the one, three, and five years in the Pensions & Investments' Performance Evaluation Report for periods ended June 30.

The International Non-Dollar Fixed Income Fund run by First Chicago Investment Advisors joined the PCM funds, placing in the top three for every period.

On the equity side, The Principal, Des Moines, Iowa; CIGNA International Advisors Ltd., London; and Provident Capital Management, Philadelphia, had the top three performers for the quarter.

Provident's International Low P/E equity fund also was the best performer for the year. Wells Fargo Advisors' international equity index fund was second, and Wellington Management Co.'s Pacific Basin portfolio was third.

Wells Fargo, American National Bank, Chicago; and Wellington funds placed first, second and third for the three and five-year periods.

Only two funds are old enough to have participated in the 10-year survey: First Chicago's international equity fund was first with a return of 19.68%, compared with the Morgan Stanley Capital International Europe Australia Far East index return of 22.11%, and the MSCI World index return of 19.14%. Morgan Guaranty's international equity fund returned 18.1% for the 10 years.

The Global Yield fund of PCM — an international investment management subsidiary of the Prudential Insurance Co. of America — returned 4.02% for the quarter, compared with the Salomon Brothers World Government bond index return of of −3.57%.

PCM's Global Bond fund returned −1.62%, making it No. 2 for the quarter.

The Global Bond fund placed first for the one-, three- and five-year periods with respective returns of 20.3%, 32.3% and 24.38%. For the one-, three- and five-year periods, the Morgan Stanley World Index returned -0.7%, 30.7% and 23.5%, respectively.

The Global Yield fund returned 19.89% for the year. PCM's Foreign Bond fund returned −6.29% for the quarter, compared with the Salomon non-U.S. dollar index of −6.96%. It was the third best performer in bonds for the three-year period with a return of 30.98%, compared with 30.71% for the World index, and was the second-best performing bond fund for the five-year period with a return of 20.56%, compared with 23.5% for the World index.

The $80 million Global Yield fund is an aggressively managed money market fund that primarily has benefited from a combination of "active hedging and its high running yield of 11.5%," according to Jeffrey Brummette, director of fixed income.

The fund was overweighted in Australia, New Zealand, United Kingdom and Canada for the first six months, performing well against the U.S. dollar, Mr. Brummette said. In the second quarter, the fund was overweighted in Australia and Canada, "avoiding the trauma of the deutsche mark and yen."

PCM's $250 million Global Bond fund is actively managed, with a focus on interest rate and currency rate anticipation, according to Ken Windheim, director-international fixed income.

The fund has "taken a lot of big moves during the year," Mr. Windheim said. "We've used all the strategies: long in bonds and shorter duration, long and short in dollars, overweighted in dollars and underweighted in bonds in December. Then, in January, we were back to a neutral dollar position and sold U.S. bonds around the world."

In the $150 million Foreign Bond fund, "we were underweighted for the bond market pre-October, neutral after Oct. 19, then underweighted until early January in anticipation of rising interest rates," he said. "In 1988, we've benefited from huge movements in the yield curves."

First Chicago's $265 million International Non-Dollar Fixed Income fund returned −2.56% for the quarter, 15.58% for the year, 32.24% for the three years and 20.55% for the five years.

The fund added 540 basis points over its benchmark during the year, mostly from an overweighting in Australian bonds, said Richard Carr, managing director. About half of the remainder came from correctly anticipating the dollar's recovery, and the rest from its defensive posture in Japan at the beginning of the period.

The $25 million Stock Separate Account run by The Principal is now 1 year old. The account is fundamentally managed and value-oriented, focusing on underpriced stocks with good track records, according to James Bell, senior analyst. Although the country allocation can reach up to 30% in Japan, the weightings remain diversified, emphasizing countries with established and stable markets and politics.

He attributed success during the quarter to the account's heavy weighting in Japanese markets.

The CIGNA International Equity account is a low-risk fund that concentrates on quality stocks in growth sectors within stable markets. The $140 million fund seeks well-financed companies with good cash flow and strong balance sheets in politically stable countries, according to Nicholas Carn, senior portfolio manager.

During the quarter, the account shifted its emphasis to markets in continental Europe from Japan.

Country allocations currently are diversified, with the largest allocation — 23% — to German markets and none in Japan, Mr. Carn said.

The $40 million Provident Capital International Low P/E Equity account buys "large-cap, low p/e stocks by country as a separate universe, selecting from the lower 40% of the market by p/e," according to Sandor Cseh, vice president-international investments.

"During the year, we benefited from the fact that low p/e did very well after the crash," Mr. Cseh said, "and low p/e since has worked worldwide."

The firm bought heavily into Japanese brokerage stocks late last year, cut back in February's rally, and then bought into Japanese utilities in June, Mr. Cseh said.

The $5 million International Stock Portfolio managed by Wellington Management Co., Boston, works in seven markets, but current allocations are 50% Japan, down from 75% during the first part of 1988; 35% in Australia; and 15% in cash, according to Jerrold Mitchell, senior vice president.

Selection of securities focuses on quality blue-chip, growth-oriented companies, Mr. Mitchell said. ■


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CASH MANAGEMENT

# Executives pleased with analysis format

## Banks did transfers in October

None of the treasury management officials who participated in the 1988 *Pensions & Investment Age* cash management survey said their banks refused to wire transfer funds during the October 1987 stock market crash.

The presidential task force that studied the market crash, known as the Brady Commission, said in its report that on Oct. 20-21 "at certain points . . . 'gridlock' apparently occurred as certain banks declined to transfer funds for a customer until they had received covering funds for that customer's account from another source."

While none of the respondents reported their banks refused to complete wire transfers for them on Oct. 20 and 21, several companies, 15, reported banks did require covering funds for the account before completing their wire transfers on those two days, indicating the Brady Commission findings were not exaggerated as some had contended.

The commission report said its sources attributed the problems to bankers coming up against the daylight overdraft limits imposed by the Federal Reserve Board in March 1986 and revised in July 1987.

Banking concerns were clearly on the minds of the survey respondents.

More than 60% of the respondents said problems in the banking industry have caused them to review their

*Continued on page 22*

**By Fred Williams**

Corporate treasury and cash management officials have given the new account analysis format developed by the National Corporate Cash Management Association a ringing endorsement, according to a *Pensions & Investment Age* survey.

In the 1988 survey, 84% of cash and treasury management executives said they are pleased with the NCCMA account analysis format released with much fanfare in November 1987 at the NCCMA's annual conference in Atlanta.

While cash managers are pleased with the account analysis format, developed after several years of study and preparation, banks are slow to offer the account format, according to the survey.

Only 57% of the survey respondents said their banks were using the NCCMA format; 43% said their banks had not adopted the standard. Only 23% of the treasury officials had asked any of their banks to use the standard; 77% had not asked their banks to use the standard.

While the response to the new format was overwhelmingly positive, it is not viewed as a critical factor in evaluating banking relationships, according to the survey. Nearly all (99%) of the respondents said they would not end a bank relationship over the use of the format, but 54% said they would use the standard as a possible tie-breaker in selecting banks and for evaluating banking services.

The survey findings were compiled from 162 responses to questionnaires mailed to domestic cash and treasury management executives in 500 large corporations in June and early July. The survey asked treasury officials their views on topics ranging from how they allocate their time to what emerging issues will affect cash management in the future.

Of the respondents, 14 were corporate treasurers; 11, treasury or treasury operations managers; 50, cash managers; 19, assistant treasurers; seven, directors or vice presidents of finance; two, chief financial officers; and three, controllers. Others were treasury analysts, directors of finance, managers of cash and banking and supervisors of cash operations.

Among other findings the survey found:

- An undercurrent of concern regarding the banking industry and rising costs and risks associated with bank fiscal soundness. Comments regarding banks appeared in several areas of the survey. (*See related story.*)
- Most corporations do not hedge short-term borrowings, even in the face of rising interest rates.
- The vast majority of treasury operations at companies that are net investors do not use outside investment management firms.
- Almost half (44%) do not have any benchmark to evaluate internal investment staff or outside managers.
- One-third of the respondents (32%) admit the benchmarks could be improved but do not plan to make any changes.
- Treasury executives believe the NCCMA has been either somewhat effective in lobbying regulatory authorities about corporate concerns (79%) or very effective (11%).

In describing how much time they spend in various treasury functions, 17% of the respondents said they were dedicated to broader corporate finance issues, 5.9% with working capital management and 26.6% in the general category described as other, which includes such areas as foreign exchange, administrative duties, taxes, operations, accounting, risk management, cash forecasting, financial analysis and regulatory work. One respondent said the "other" category was for "putting out fires."

According to the survey, treasury managers spend 6% of their time on float management, 5.5% on selecting collection/disbursement banks, 3.5% selecting lending banks and 11% on other banking relations. Investing corporate cash accounted for 11.3% of their time and short-term borrowing, 6.5%. Electronic funds transfer and electronic data interchange issues now take only 3.8% of their time, according to the survey.

Only 13% of respondents employ hedging techniques against potentially rising interest rates on an average of 32.79% of their borrowings. Another 23% said they were considering a hedging program. More than half, 57%, said they had never hedged their portfolios. The treasury managers considering hedging their short-term borrowings may have been affected by the upward trend in interest rates. Rates on three-month Treasury securities have increased to 7.07% from 6.16% a year ago; on six-month securities, rates increased to 7.54% from 6.25% one year ago.

Only 27 of the 162 respondents reported using or planning to use outside investment management firms by 1989. Ten respondents used one manager and 10 used two managers; the remainder reported using more than two managers.

Corporate treasury officials continue to display some reservations about the certification program being offered by the NCCMA. Respondents reported a total of 52 people in their corporations took the NCCMA certified cash manager examination in 1987 with 35 passing the exam for a success rate of 67%, the same as reported by the NCCMA.

A total of 39 people took the exam in 1988, according to the survey, but 1988 results were not available by the time the survey data were compiled.

Of treasury executives asked whether their company considered the certified cash manager program worthwhile, 41.5% said no while 58.5% saw it of value.

A few respondents took the opportunity to provide comments

*Continued on page 22*

### Treasury Functions

| Average amount of time spent on: | |
|---|---|
| Float management | 6% |
| Selecting collection/disbursement banks | 5.5% |
| Selecting lending banks | 3.5% |
| Other bank relations | 11% |
| Investing corporate cash | 11.3% |
| Short-term borrowing | 6.5% |
| Broader corporate finance | 17% |
| EFT & EDI development | 3.8% |
| Working capital management | 5.9% |
| Pension investments | 2.9% |
| Other | 26.6% |

**1. Have troubles in the banking industry this year caused you to review your banks' fiscal soundness more systematically?**

| | |
|---|---|
| Much more | 10% |
| Somewhat more | 51% |
| No | 39% |

**2. What percentage of bank charges do you pay in:**

| | |
|---|---|
| Compensating balances | 47.6% |
| Cash fees | 52.4% |

**3. Have you hedged any of your borrowings to protect against potentially rising interest rates?**

| | |
|---|---|
| Do so now | 13% |
| Considering | 23% |
| Ended this year | 3% |
| Ended before 1988 | 4% |
| Never hedged | 57% |

## NOTES

### *NACHA seeking chief*

WASHINGTON — The National Automated Clearing House Association hopes to name a new president and chief executive officer before the end of November to replace William R. Moroney, who announced his resignation in early August.

Mr. Moroney, who heads the search committee seeking his replacement, is leaving to start his own publishing business.

William B. Nelson, senior director of network services at NACHA, said the search committee is evaluating candidates to replace Mr. Nelson and the NACHA board of directors hopes to announce the new president at its Nov. 17 board meeting. Mr. Moroney has agreed to remain in his post until his replacement is named.

### *Program launched*

SAN ANTONIO, Texas — Diamond Shamrock R&M Inc. has initiated its first commercial paper program since being spun off as a separate company from Diamond Shamrock Corp., now Maxus Energy Corp., nearly 15 months ago.

The company issued $17 million in paper to finance working capital and reduce corporate debt.

Diamond Shamrock is authorized to issue up to $145 million but Robert C. Becker, treasurer, said the company plans a "relatively small" presence in the commercial paper market in the next six to 12 months. He said the company plans to issue "not more than $50 million to $75 million" in commercial paper during that time.

Mr. Becker said short-term financing had been handled through a series of bank revolving credit arrangements. The credit lines will continue to be maintained.

Diamond Shamrock's commercial paper dealer is Merrill Lynch Money Markets Inc., New York.

Mr. Becker said commercial paper should provide "at least" a one percentage point rate differential over bank borrowing, but declined to disclose the exact rate obtained. Access to the commercial paper market should reduce the company's overall cost of borrowing, he said.

"When we were spun off 15 months ago we had a 60% debt-to-capitalization ratio and now we have it down to 45% and rates then reflected a higher risk factor," said Mr. Becker.

Standard & Poor's Corp., New York, has assigned a rating of A-2 to the Diamond Shamrock commercial paper program and reaffirmed the BBB rating on Diamond Shamrock preferred stock.

Mr. Becker said a senior financial analyst will administer the company's commercial paper program in the treasury department.

The Diamond Shamrock commercial paper program is not hedged.

### *Fed getting tougher*

WASHINGTON — The Federal Reserve Board intensified its war

*Continued on page 22*

This announcement appears as a matter of record only July 15, 1988

**INVEXCO, INC.**

Houston, Texas

has entered into a

**$180,000,000**

Six-Year Oil and Gas Exploration and Development Program

with

**HARRY H. CULLEN**

and

**QUINTANA PETROLEUM CORPORATION**

*Aeneas Venture Corporation*
*an investment affiliate of Harvard University*
*and other investors have acquired interests in Invexco, Inc.*

The undersigned initiated this transaction

Lester Harold Smith
Houston, Texas

Cambridge Capital Holdings
New York, New York

# Transfers made

*Continued from page 21*
banks' fiscal soundness more systematically. In fact, banking problems were mentioned throughout the survey responses in various other contexts such as mergers, federal bailouts and general solvency.

The trend of cash managers consolidating banking services is continuing as treasury executives reported dropping a total of 64 banks during the last year and an average of two to three banking services each, while reducing the use of 35 banks providing an average of one to two banking services each.

Services dropped or reduced covered the gamut from zero balance accounts, depository arrangements, controlled disbursement, investment and lines of credit. Lockbox services were mentioned most often as being dropped or reduced.

There has been a definite trend for the past several years among treasury managers toward paying their banks through fees rather than balances. The majority of respondents to the survey indicated the trend is continuing; 52.4% said they pay bank charges in fees and 47.6% in compensating balances. When asked their goal for 1989, respondents continued to favor fees by 55.3%, while only 44.6% plan to pay through compensating balances.

Banks have been raising fees for cash management services, according to survey respondents, primarily for lockbox services, wire transfers, balance reporting, account maintenance, check processing and controlled disbursement. Several respondents said their banks had raised fees for "all" cash management services.

Some bank services, however, became more competitively priced during the past 12 months, according to the survey. Services mentioned as becoming more competitively priced include check clearing, automated clearinghouse services, account reconciliation, controlled disbursement, and credit line fees. ■

# Executives

*Continued from page 21*
such as "we consider it a personal, NOT a professional credential," and "we encourage taking the exam, (but) do not believe it necessary to do the job," and "personal worth only."

Given the media attention over electronic payment programs and efforts to develop an electronic corporate trade payments system, the survey findings on electronic funds transfer were somewhat surprising.

Most treasury executives have no plans to initiate electronic funds transfer programs to pay vendors. By a margin of 2 to 1, respondents said they have no immediate plans to pay vendors electronically. Of those who do plan to offer an electronic payment program, most plan to start in the 1989-'90 time period.

When asked to describe two issues they think will be important to cash managers during the next few years, respondents concentrated on several areas. The areas mentioned were: EFT for paying and receiving; the Federal Reserve Board's efforts to deal with daylight overdrafts; Regulation CC, which implements the Expedited Funds Availability Act to speed check processing; the proposed 2 p.m. check presentment proposal by the Fed; electronic data interchange; wire transfer security and liability and float management and Fed efforts to eliminate float.

Other areas also mentioned include bank capital adequacy standards, continued deterioration of bank services, higher banking costs and risks in the payment system. ■

## NOTES

*Continued from page 21*
on remote or delayed disbursement practices during June by issuing for public comment a proposal to clamp down on checks written by banks on another bank in a separate processing district.

The proposed rule — which would become effective April 1, 1989 — would permit a bank to issue a check drawn on another bank only if it can ensure a depository bank in the same community as the issuing bank can receive credit for the transaction as early as a check drawn on the issuing bank.

In an accompanying memorandum, the Fed stated it "believes the banking industry has a public responsibility not to design, offer, promote, or otherwise encourage the use of a service expressly intended to delay final settlement and that exposes payment recipients to greater than ordinary risks."

The board claimed delayed disbursement results in higher transportation and processing costs and an increased possibility of check fraud.

Despite its past policy statements on the issue of delayed disbursement, the Fed said the practice is still being used.

PORTFOLIO MANAGEMENT

FEATURE

# International fine-tuning

## GDP-weighted system includes growth projections

By Ronald D. Frashure

Much attention is being given to alternatives to market-value-weighted strategies for international equity investing.

Concern over Japan's high weighting in the widely followed indexes, especially the Morgan Stanley Capital International Europe Australia Far East index, is promoting a search for an alternative to serve as a benchmark for international indexing, or as a normal portfolio for active management.

One option to market-value weighting is weighting by gross domestic product, as discussed by David A. Umstead (*Pensions & Investment Age*, May 2). More recently, Morgan Stanley officials recognized the concern and added a GDP-weighted version of the market-value-weighted EAFE (*P&I Age*, Aug. 22).

A major drawback to a GDP-weighted strategy is that it does not consider factors accounting for valid differences in the ratios of market-value weighting to GDP weighting in each country.

One difference especially is economic growth.

Investors typically would pay more for stocks in a high-growth, developing Pacific Basin economy than for those in a cyclical growth, developed European country, which might have very cautious economic policies and a declining population (e.g., West Germany). An analogy would be investors who pass up stocks with the highest dividend yields when the dividend isn't likely to grow much in favor of somewhat lower yielding stocks with prospects for much stronger dividend growth.

A way to mitigate this problem would be to incorporate projected long-term economic growth into a GDP-weighted strategy. The obvious question is how to project GDP growth. Experienced investors know the pitfalls in relying on economists' forecasts for even short-run conditions. Also, those pursuing customized index-matching approaches usually want to avoid qualitative or subjective inputs to the process.

To get over this hurdle, I've tested to see whether long-term (10 years) historical real economic growth rates have been a reasonably good indicator of subsequent long-run growth in a number of countries. This test appears intuitively plausible. A developing economy that has been growing at an 8% to 10% real rate annually might slow to 6% to 8% but probably won't drop off precipitously — unless there is a calamitous development, economic or political. Conversely, a mature economy that has grown at a 2% to 3% rate for a long period might accelerate to 4% to 5% for a while, but probably isn't going to jump to a sustained 8% to 10% pace for an extended period.

The test used data from the Organization for Economic Cooperation and Development for countries in the EAFE index, going back to 1961. (The data for non-OECD countries in EAFE were obtained from other official sources.) I picked this starting point because most of the initial recoveries from World War II that might distort differences in national economic performance had taken place by the end of the 1950s. I computed 10-year historical real GDP growth rates country by country for each year beginning for the period 1961 to 1970 and then did a cross-sectional regression against subsequent actual moving 10-year real GDP growth rates for each EAFE country. Ten-year growth rates were used to avoid business cycle distortions over shorter periods.

Ten-year historical annualized real GDP growth proved to be a good predictor of subsequent 10-year annualized growth, with correlation coefficients ranging as we moved forward year by year from 0.66 to 0.96. (The t-statistics were also high, indicating statistical validity to the prediction, varying from 3.2 to 6.4.)

The real question is whether adding long-run GDP growth as a predictor of future growth to a plain GDP-weighted strategy can enhance investment results from the unmodified strategy. The answer is definitely yes.

Arriving at this answer required a technique for augmenting the GDP-weighted strategy with growth. Our approach was straightforward. At any point in the time period, we used trailing historical 10-year real GDP growth as a proxy for future growth and then computed the 10-year projected real GDP weighting country by country as a percentage of EAFE's total projected GDP. These projected 10-year GDP weights were used to set the country weightings in the growth-enhanced GDP strategy, as we call it.

As shown in Table 1, the growth-enhanced GDP strategy results in somewhat different weightings from a plain GDP-weighted strategy and a substantial difference from the conventional market value-weighted strategy. (The underlying GDP statistics, based mainly on OECD data, are stated on a common basis of 1980 price levels and exchange rates.)

Both GDP indexes significantly reduce Japan's weighting compared to that in the market-value index. But in the growth-enhanced GDP index, Japan's weighting is higher than in a plain GDP index. The reason is the growth-enhanced index allows for Japan's relatively high economic growth. West Germany and the United Kingdom, on the other hand, have lower weights in the growth-enhanced GDP index than in the plain GDP index, because of their relatively slow-moving economies. But their weights in both GDP indexes is significantly higher than in the market-value index, reflecting the relative size of their economies as opposed to the value of their stock markets.

At the same time, Hong Kong and Singapore/Malaysia have higher weightings in the growth-enhanced GDP strategy than the plain GDP version.

Table 2 shows the year-by-year results from a growth-enhanced GDP strategy, a plain GDP index and the market-value approach of the EAFE. (The results are net of rebalancing costs estimated at 75 basis points for buys and sells, in line with the current transactions cost; the market-value weighted index requires no rebalancing.)

The growth-enhanced GDP strategy performed in line with EAFE from 1971 to 1987, while the plain GDP strategy did about 40 basis points annually below EAFE. Each of the GDP-based strategies had a somewhat higher volatility of returns than EAFE. ■

Ronald D. Frashure is executive vice president of Acadian Asset Management Inc., Boston.

**TABLE 1**

**EAFE index weighting comparisons**
**(As of Dec. 31, 1987)**

| | Market value | GDP | Growth-enhanced GDP |
|---|---|---|---|
| Austria | 0.2% | 1.5% | 1.4% |
| Belgium | 0.9 | 2.3 | 2.1 |
| Denmark | 0.3 | 1.4 | 1.3 |
| France | 3.6 | 13.6 | 12.5 |
| West Germany | 4.7 | 16.4 | 15.0 |
| Italy | 2.6 | 9.5 | 9.3 |
| Netherlands | 2.2 | 3.4 | 3.0 |
| Norway | 0.2 | 1.3 | 1.4 |
| Spain | 1.5 | 4.5 | 4.1 |
| Sweden | 1.2 | 2.6 | 2.4 |
| Switzerland | 2.8 | 2.1 | 1.9 |
| United Kingdom | 14.4 | 11.4 | 10.5 |
| *Europe* | *34.6* | *70.0* | *64.8* |
| Australia | 2.1 | 3.3 | 3.4 |
| Hong Kong | 1.2 | 0.8 | 1.4 |
| Japan | 61.4 | 24.8 | 28.0 |
| Singapore/Malaysia | 0.7 | 1.1 | 2.4 |
| *Pacific Basin* | *65.4* | *30.0* | *35.2* |
| TOTAL | 100.0 | 100.0 | 100.0 |

Source: Morgan Stanley Capital International and Acadian Asset Management Inc.

**TABLE 2**

**EAFE index performance comparisons**
**(Total returns in U.S. dollars)**

| | Market value | GDP* | Growth-enhanced GDP* |
|---|---|---|---|
| 1987 | 24.9% | 9.6% | 11.0% |
| 1986 | 69.9 | 68.6 | 70.3 |
| 1985 | 56.7 | 80.4 | 77.8 |
| 1984 | 7.9 | 7.1 | 7.8 |
| 1983 | 24.6 | 25.1 | 25.1 |
| 1982 | −0.9 | −0.3 | −1.0 |
| 1981 | −1.0 | −4.7 | −4.2 |
| 1980 | 24.4 | 20.5 | 20.7 |
| 1979 | 6.2 | 11.7 | 11.1 |
| 1978 | 34.3 | 35.0 | 36.5 |
| 1977 | 19.4 | 13.5 | 12.3 |
| 1976 | 3.7 | −0.6 | 1.1 |
| 1975 | 37.1 | 35.5 | 32.7 |
| 1974 | −22.2 | −16.3 | −16.1 |
| 1973 | −14.2 | −4.2 | −5.5 |
| 1972 | 37.6 | 38.8 | 47.0 |
| 1971 | 31.2 | 14.3 | 15.8 |
| Annual compound | 17.7 | 17.3 | 17.7 |
| Standard deviation | 23.3 | 25.0 | 25.2 |

All returns before withholding taxes.
* After estimated rebalancing transaction costs.

# Greece fund to be launched

LONDON — Alliance Capital Management Corp.'s London office is preparing to launch a closed-end mutual fund investing in Greece by late October, according to Mark Breedon, vice president of the firm, which manages $800 million in international assets for U.S. tax-exempt clients.

Like the firm's recently launched Spain Fund, the Greece fund likely will be offered in the United States, Europe and Japan.

The fund will be managed by Alliance and a local Greek investment adviser. Alliance runs the Spain fund — which invests 25% of its assets in unlisted securities — in a venture with Banco de Viscaya, Madrid.

In addition, the Greece fund will be financed in part by mezzanine capital. First Boston Corp., New York, was lead manager of the Spain fund, which raised $120 million. ■

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# Soars

*Continued from page 1*

"The bulk of the money and maybe the majority of the clients are now in global," Mr. Brinson said. "More than half of our assets represent participants in global products."

Ballard Biehl & Kaiser, San Mateo, Calif., adds the categories of real estate and precious metals. "It's a tremendous opportunity for higher returns and hedging risk," said Peter Hill, executive vice president. "Sometimes it's difficult to deal with the liquidity problems, but markets grow up and mature. It's one way to expand your horizon."

Ballard Biehl & Kaiser, also an investment management consultant for pension sponsors interested in tactical asset allocation, now has $200 million under management for the product, up from $125 million as of Aug. 30, 1987, a 60% increase. Five clients were added, bringing the total to 25.

Prudential Diversified Investment Strategies, an affiliate of the Prudential Insurance Co. of America, Newark, N.J., added 2.8% to last year's amount, giving it a total of $7.1 billion in tactical asset allocation products, up from $6.9 billion as of Aug. 31, 1987. Ten clients were added, bringing the total to 155.

Mellon Capital Management, San Francisco, reported $6 billion, up 50% from $4 billion. Mellon had 48 clients as of Aug. 31, last year's client number was unavailable.

TSA Capital Management, Los Angeles, reported $3 billion, up 30.4% from $2.3 billion as of Aug. 31, 1987. Ten clients were added, bringing the total to 30.

Renaissance Investment Management Inc., Cincinnati, reported $1.51 billion this year, compared with $1.24 billion as of June 30, 1987, a 21.8% increase. The firm added 24 clients, bringing the total to 252.

Avatar Associates, New York, which has gained 10 clients in three months, experienced a 62.5% increase, to $1.3 billion from $800 million last year. It has 93 clients, up from 77.

Citicorp Investment Management, New York, also saw healthy growth, to $1.25 billion from $850 million, a 47% increase. Three clients were added since July 30, 1987, bringing the total to 13.

Bankers Trust Co. — Investment Management Group, New York, maintained its $1.05 billion in tactical asset allocation assets for 13 clients. Bankers Trust experienced neither a loss nor a gain because of the market crash, according to Steven A. Lauer, vice president and manager of the options and futures group.

J.P. Morgan Investment Management Inc., New York, which launched its tactical asset allocation product this year, already has $500 million in assets and seven clients as of Aug. 30.

Chase Investors Management Inc., New York, was the only large firm to see its tactical asset allocation assets decrease, to $300 million, from $330 million. Michael Schonberg, managing director, attributed the decrease to Oct. 19. There is one client.

Matrix Capital Management, Greenwich, Conn., gained six clients during the 12 months ended Aug. 31 for its one-year-old program. Matrix has a total of $187 million from six clients.

Webster Capital Management, New York, which also launched its tactical asset allocation product a year ago, now has one client and $50.1 million under management. ■

# Big play

*Continued from page 2*

Schmitting said.

The portfolio holds about 320 to 330 stocks, totaling $1 billion in market value, he added.

The August filings, although representing a small number of the stocks in the portfolio, involved a major part of its market value, amounting to $91 million, or nearly 10%, based on the SEC data. The board holds less than 5% of most of the stocks in the small-cap portfolio.

Mr. Schmitting is assistant to John Nelson, investment director in charge of the small-stock portfolio who was unavailable for comment.

The board has four other equity portfolios, all for stocks larger than $500 million in market capitalization. The portfolios have about $6.75 billion combined and are run or overseen by James Severance, investment director.

Mr. Schmitting noted that, as a policy, he and Mr. Nelson will retain stocks in the small-stock portfolio even after those companies' market capitalization grows beyond $500 million, if their investment outlook looks promising. He said they won't purchase any additional shares of the stocks unless their market cap again falls below $500 million.

According to the most recent SEC filings, dated Aug. 22, the board disclosed reaching the 5% threshold for:

- **Angelica Corp.**, St. Louis, with 5.4%, or 496,000 shares, valued at $11.1 million as of the closing price Aug. 26;
- **JP Industries Inc.**, Ann Arbor, Mich., 5.2%, or 580,700 shares, valued at $9.1 million;
- **Western Waste Industries**, Gardena, Calif., 5.3%, or 260,000 shares, valued at $4.5 million;
- **MTS Systems Corp.**, Eden Prairie, Minn., 6%, or 345,000 shares, valued at $6.4 million.

On the same day in another filing, the board disclosed a recent reduction in its holding of **Healthcare Compare Corp.**, Downers Grove, Ill., to 6.1%, or 345,000 shares, valued at $4.8 million. Only a week earlier, the board reported raising its ownership in Healthcare Compare to 7.9%, or 445,000. By contrast, as of March 31, the board held no shares in the company, according to SEC 13(f) filings, reported by CDA Investment Technologies Inc., Rockville, Md.

In other filings in August, the board reported boosting its holdings in:

- **United Education & Software**, Encino, Calif., to 7.3%, or 475,000 shares, valued at $2 million;
- **Pic 'N' Save Corp.**, Carson, Calif., to 5%, or 1.9 million shares, valued at $24.8 million;
- **Pope & Talbot Inc.**, Portland, Ore., to 5.4%, or 647,900 shares, valued at $10.8 million;
- **Emcon Associates**, San Jose, Calif., to 5.9%, or 145,000 shares, valued at $2.2 million;
- **Toro Co.**, Bloomington, Minn., to 7.6%, or, 731,700 shares, valued at $13.6 million; and
- **Dresher Inc.**, Bedford Park, Ill., to 6.8%, or 306,000 shares, valued at $1.7 million.

In some of the 11 companies, the board's investment would make it one of the leading institutional shareholders, able to exert a strong voice through its proxies, according to CDA's 13(f) reports. In some cases, institutions hold less than 50% of a particular company's stock. At United Education, institutions hold only 19% of its shares, based on the first quarter 13(f) reports. Based on that data, which don't reflect more recent changes in positions of other institutional investors, the Wisconsin board would be United Education's biggest institutional holder, owning more than one-third of the total institutional position. ■

# Buybacks assessed

**By Marlene Givant**

The size of the U.S. equity market could shrink to that of the United Kingdom within 30 years if net withdrawals of corporate equities from the market continue at their current rate.

The United States represents 30.8% of the Morgan Stanley Capital International World index while the United Kingdom represents only 8.7%.

Since 1984, corporations have been retiring more stock through stock repurchases, leveraged buyouts and mergers and acquisitions than they have been issuing — despite the large volume of initial public offerings in recent years.

"Sooner or later the withdrawal of equity is likely to come to an end, removing a source of support to the market," noted Sarah Gardner, U.S. analyst for UBS Phillips & Drew International Ltd., London, in an economic briefing called "American Pie."

"If (net withdrawals) carry on at this rate much longer, it will get a bit silly. But at the moment, there doesn't seem to be any end to it," Ms. Gardner said.

If inflation picks up and interest rates increase during the next two to three quarters, net withdrawals will slow, she said.

"I think we've seen a top of the U.S. market (when the Dow Jones industrial average reached near 2000) so I feel a down trend is on its way. . . . As interest rates climb, it will be less advantageous for companies to repurchase their shares. The peak of net withdrawals was after the crash. They will gradually slow into next year."

Net withdrawals in the years since 1984 have slowly become a factor in supporting the U.S. stock market.

"It's a structural change that has taken place. We're coming to an end of the cycle. Net withdrawals will soon be outnumbered by IPOs," she said.

Until now, the decline in the number of shares in the U.S. market has been overshadowed by rising equity prices.

"Now that there's a downturn in stock prices, I would imagine the U.S. market value ($3.5 trillion as of the first quarter) will level off because of the effect of net withdrawals," Ms. Gardner said.

Net withdrawals peaked after the crash. As initial public offerings immediately dried up and mergers and acquisitions activity stagnated, many companies announced stock repurchase plans, viewing their companies as cheap.

Consequently, net withdrawals rose from $75.9 billion in 1987's third quarter to $93.9 billion in the fourth quarter of 1987 and $92.7 billion in the first quarter of 1988.

In recent years, equity prices have benefitted from the declining number of total shares. Fewer shares have led to higher reported earnings per share.

Among other findings in the report:

- Despite the attention that has been focused on the overseas sector's ability to affect the U.S. market, foreign investment in the United States accounted for just 6% of market value at year-end 1987, compared with 5% in the U.K. and 3% in Japan.
- About two-thirds of U.S. corporate equities are owned by individuals, while two-thirds of the U.K. equity market is owned by institutions. U.S. pension funds own just 16% of all domestic equities, including mutual funds; the corresponding figure is 32% in the U.K. Institutions in total (including insurers) own 24% of equities in the U.S. compared with 67% in the U.K.
- The shareholder muscle of U.S. individuals is not widely dispersed. Although private investors in the U.S. owned 64% of corporate equities at the end of 1987 through direct holdings and mutual funds, slightly more than half of these equities were owned by individuals in the top 2% income bracket; 85% of the individuals earned more than $50,000 a year. ■

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PENSIONS & September 19, 1988

# Investment Age

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# Captives' assets targeted

By Trudy Ring

Domestic investment managers are making a push into the $14 billion captive insurance company market, long dominated by internationally oriented managers.

"It's an area where there will continue to be a growing pool of investible assets that will have to be managed," said Michael Witte, vice president of Citicorp Investment Management, New York. Domestic managers are certain to step up their marketing efforts to captives, he said.

Citicorp manages $125 million for captives located outside the United States, but is marketing to those in the United States as well, and finds that business is the fastest-growing portion of its $2.2 billion in total insurance company assets under management, Mr. Witte said. Citicorp might dedicate one marketer solely to the captive area, he said.

A "historical accident" has given internationally oriented managers with expertise in running Eurodollar bonds the biggest share of captive assets so far. Changes in the captive marketplace, however, could mean other types of managers and other asset classes will get a larger chunk of future cash flows.

A captive insurance company is any insurer that is owned by another company. Companies set up captives for a variety of reasons — to self-insure, to avoid fluctuations in rates charged for insurance or to gain direct access to the reinsurance markets, in which an insurer sells off a portion of the risk it has assumed.

In the 1960s and 1970s, many U.S. companies set up captives offshore because of tax and regulatory advantages. Bermuda has been the most popular domicile for captives, with about 1,300 such companies; there are more than 3,300 captives in the world. Other popular domiciles include the Cayman Islands and Barbados.

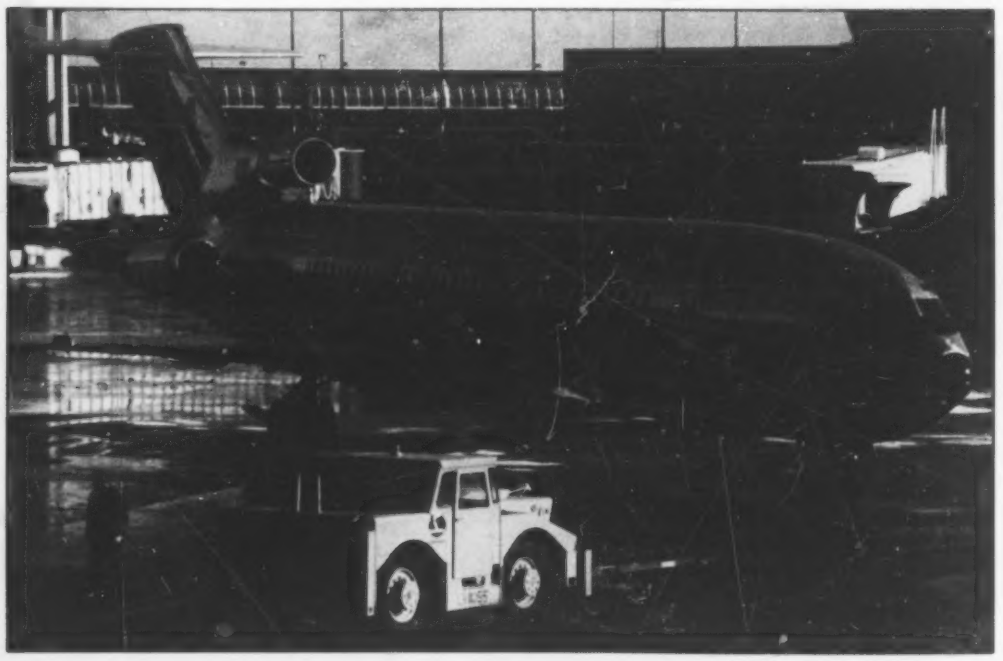
The 1986 Tax Reform Act, however, eliminated many of the advantages of doing business offshore, and several states have passed laws making it cheap and easy to set up captive insurers. Vermont, with 124 captives established through the first quarter of

*Continued on page 33*

**Leading captive insurance managers**

| | $ mils. |
|---|---|
| J.P. Morgan | 2,600 |
| N.M. Rothschild | 1,700 |
| Morgan Grenfell | 1,300 |
| Morgan Stanley | 1,052 |
| Chase International | 1,000 |
| Baring International | 758 |
| Schroder Investment | 540 |
| WorldInvest | 500 |
| Posthorn Global | 400 |
| Travelers Asset (Int'l) | 250 |
| Citicorp | 125 |

Source: *Pensions & Investment Age*



Eastern Air Lines' request for a waiver of its $105 million pension contribution has come under attack by the International Association of Machinists and Aerospace Workers union.

# Eastern battle wages

## Union says second waiver not needed

By Nicky Robertshaw

WASHINGTON — The Eastern Air Lines machinists have asked the government not to waive the Texas Air Corp. subsidiary's $105 million pension fund contribution, saying the airline can afford to pay but prefers to use the money to drive out the unions.

"Texas Air and its subsidiaries have money to spend, money to lend and money for strike war chests," said Charles E. Bryan, president and general chairman of the International Association of Machinists and Aerospace Workers, District Lodge 100, in a Sept. 7 letter to the Internal Revenue Service. "No

*Continued on page 30*

# Realty unit's management restructured

By Andrew Reinbach

NEW YORK — Steven E. Wheeler, Morgan Stanley Real Estate Inc.'s co-managing director, is leaving the firm, and his partner William S. Bahrenburg Jr. has been shorn of administrative duties.

The moves are the latest round of what insiders say is a long-running political struggle waged by Morgan Stanley Inc. for control of its real estate group.

James M. Allwin, managing director, has moved from the mergers and acquisitions staff to assume administrative control of the unit.

Mr. Allwin reports to Eric Gleacher, head of mergers and acquisitions; the unit formerly reported to Robert Greenhill, who runs the corporate finance group.

Mr. Bahrenburg is taking the title of chairman and will concentrate on new business development. Bowen H. "Buzz" McCoy, previously chairman, will be chairman emeritus.

"I wouldn't personally use the word control, but there's an element of truth in that," said Mr. Bahrenburg in reference to the parent company's efforts. "One of the efforts here is to better integrate us with corporate finance."

The struggle between management and the real estate unit is rooted in the unit's origins as Brooks Harvey & Co., an old-line brokerage firm — credited by some with helping invent real estate investment banking — that was acquired by Morgan Stanley in 1969.

Morgan Stanley officials, realizing real estate types are different from the typical investment banker, set about integrating the new unit into the fold.

Mr. Bahrenburg helped in this effort, shifting from corporate finance to Brooks Harvey not long after he joined Morgan Stanley in the late 1960s.

But the unit's success led it in its own direction. It is widely credited with being the first to apply the concept of the internal rate of return to

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**ROPERTY** - Follows Page 18

## LATE NEWS

### 2 compute retiree-health liability

WASHINGTON — Two estimates of the size of the current retiree-health care liability for the private sector released last week are less than one-fourth of the $2 trillion figure floated last year on Capitol Hill.

The General Accounting Office estimates the liability for current active employees and retirees is $402 billion — $221 billion in accrued benefits and $181 billion in benefits not yet accrued.

This estimate, however, does not take into account the effect of the Medicare Catastrophic Coverage Act of 1988, which would reduce retiree-health care costs 30%, according to the Employee Benefit Research Institute, Washington.

An EBRI study estimates the liability is $169 billion for current active employees and retirees, if the Medicare act is taken into account, and $247 billion if it is not.

### Employees buy Wyatt Cafeterias

DALLAS — Shareholders of closely held Wyatt Cafeterias Inc., Dallas, sold the company to a new Wyatt employee stock ownership plan in a leveraged transaction worth an estimated $186 million.

Ten banks participated in the financing, said Mark Shackelford, Wyatt Cafeterias' chief financial officer, but he declined to name the bank network. About $35 million of the financing package was subordinated debt and $15 million, preferred equity, he said.

Westinghouse Credit Corp, Pittsburgh, provided $15 million of subordinated debt and the $15 million in preferred equity. The remainder of the debt was provided by American General Corp., a Houston insurance company.

The sale of the company to employees ended a two-month attempt by Furr's/Bishop Cafeterias L.P., Lubbock, to take over the nine-state, 120 chain of cafeterias. Wyatt shareholders rejected a sweetened bid of $91.25 per share, or $188 million, by Furr's/Bishop in favor of the leveraged ESOP, which provided shareholders $84 per share.

### Oregon acquires office building

WASHINGTON — Alex. Brown Realty Advisors Inc., Baltimore, has purchased the 1333 New Hampshire Avenue Building in Washington's central business district on behalf of the $8.7 billion Oregon Public Employes Retirement System, Salem, which is a separate account client.

The 12-story, 321,000-square-foot office building is 100% leased. The fund paid $75 million to Lehndorff New Hampshire Venture. Rosenthal-Shuler Realty Partners acted as the agent on the purchaser's behalf.

Alex. Brown has $1.3 billion in assets under management for real estate clients.

### Firm formed for realty investing

MONTVALE, N.J. — Campbell Kunz Management Corp., Montvale, N.J., is entering the real estate investment management arena, planning to capitalize on the turnaround of the real estate market.

The firm, led by Principals Kenneth D. Campbell and Raymond G. Kunz, is majority owned by Audit Investments Inc., the Montvale-based firm of which Mr. Campbell is president and founder. Mr. Kunz had been chief operating officer of London & Leeds Shopping Center Corp. and had served as a vice president with Morgan Stanley Realty Inc.

Mr. Campbell said his strategy is to make client investments in both the direct real estate and the real estate securities markets.

"We believe that sophisticated investors must address both components . . . in today's market to maximize return on their real estate allocation," he said.

Campbell Kunz will serve pension plan sponsors, foundations and endowments as well as other institutions and individual investors.

Audit Investments manages $7 million for institutional real estate clients.

### Jim Walter selects 2 consultants

TAMPA, Fla. — Jim Walter Corp. has hired Performance Analytics Inc. and its affiliate Spectrum Advisory Corp., both in Chicago, as consultants to its newly organized, $125 million pension fund.

Jim Walter was spun off from Walter Industries Inc., also in Tampa, in April, and the pension assets were transferred in June, according to John P. Borreca, chief financial officer.

Mr. Borreca said the consultants will help the new firm determine processes for manager searches, asset allocation, performance evaluations and other pension fund decisions "from soup to nuts."

## DEPARTMENTS


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Vol. 16, No. 20 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1988.

# SEC is challenged

## Execs target one-share, one-vote rule

**By Marcia Parker**

WASHINGTON — America's chief executives, who largely have been quiet on the sensitive subject of corporate governance, have taken the first step toward mounting a legal challenge of a long-standing rock bed of corporate democracy — the one-share, one-vote rule.

But the Business Roundtable, the lobbying group that represents the chief executives of America's 200 largest corporations, did not spell out the grounds for its expected challenge. The group's two-page petition for review of the controversial Securities and Exchange Commission rule was filed Sept. 2 with the U.S. Court of Appeals for the District of Columbia Circuit.

The next move is for a Roundtable committee to go beyond its decision to preserve its right to challenge the rule by filing the petition. The group has 60 days to *file a more detailed complaint*. The issue was discussed at the board meeting Sept. 15, but no decisive action was taken.

After lengthy discussion and public hearings, the SEC in July adopted a limited one-share, one-vote standard for stocks listed on the nation's largest securities exchanges. There was intense debate over a 1986 proposal by the New York Stock Exchange to allow listed companies to have unequal voting rights (*Pensions & Investment Age*, Dec. 8, 1986). A number of other stock exchanges already had loosened their rules on one-share, one-vote, and the NYSE was feeling competitive pressure.

The Roundtable lobbied hard to defeat the one-share, one-vote rule. It is believed the group will mount its legal challenge to the rule by arguing the SEC has no jurisdiction in the matter, an argument critics dismissed earlier as having no merit.

"It's not surprising that the Business Roundtable has challenged the SEC's one-share, one-vote ruling. Its representatives have contended from the beginning of the SEC's hearings on the issue that the commission did not have the authority to prescribe voting rights — that that should be left to the states, not a federal regulatory agency or even Congress," said Peg O'Hara, director-corporate governance service at the Investor Responsibility Research Center, Washington.

"If that is indeed the grounds on which the Roundtable bases its challenge, it's a pretty basic issue, and you might very well see Congress react by either mandating a one-share, one-vote standard or specifically spelling out the SEC's authority to do so. Whatever happens, it's unfortunate to see such a fundamental right of stock ownership as one vote per share become a political football."

The SEC plans to respond to the petition for review after the Roundtable files a more detailed brief, said Daniel Goelzer, SEC general counsel. He said it would likely be a couple months before oral arguments would be heard, assuming the Roundtable pursues the challenge. He noted the SEC's Office of the General Counsel had advised the commission it had the authority to impose the rule.

Several groups, including The United Shareholders Association, a Washington-based group headed by Texas oilman T. Boone Pickens that led the drive to defend one-share, one-vote, and Institutional Shareholder Services, a Washington consulting firm, said they are considering filing

*Continued on page 34*

# $1 billion to small cap

**By Curtis Vosti**

Small-capitalization stocks, buoyed by returns of more than 13% in the first eight months of the year, have drawn more than $1 billion in new institutional investments this year.

Many more investments were acknowledged, although not enumerated, as pension sponsors said the main reason for their small-cap investments was a desire to increase diversification into what was for many, a new asset class.

The at least $1.2 billion in small-capitalization allocations since the beginning of the year were itemized through interviews and asset allocations reported in *Pensions & Investment Age*. Among the largest moves were:

- a $360 million commitment by the $8 billion Los Angeles County Employees' Retirement Association. The fund could add another $90 million by year's end;
- a $190 million allocation earmarked by the $2.7 billion Fire & Police Pension System — City of Los Angeles; and
- a $100 million investment by the $1.9 billion Board of Pensions of the Presbyterian Church (U.S.A.).

The Los Angeles County fund's move was spurred by an asset allocation study a couple of years ago, according to Administrator Charles Spencer, but the fund didn't get around to investing until this year.

"Purely for diversification," he said of the investments, but he acknowledged the strong performance of small stocks this year encouraged the fund's trustees to make the investments.

The Russell 2000, an index of stocks with between $25 million and $300 million in capitalization tracked by Frank Russell Co., Tacoma, Wash., returned 22.75% for the first eight months of 1988, while the NASDAQ composite index returned 13.9% for the same period.

In comparison, the Standard & Poor's 500 stock index has returned 8.5% through Aug. 31.

The fire and police system ventured into small-cap stocks this year because "it was just its time," said Allan Moore, assistant manager. He said an asset allocation study two years ago recommended the small-cap investment as a new asset category for diversification.

The system's small-cap managers, BMI Capital Corp., New

*Continued on page 31*

# Giant firms prosper as plans grow

**By Carol Wiley**

The maturing pension fund market might be signaling a trend in the money management industry toward "megamanagers" to whom large pension sponsors give the bulk of their business.

Larger managers apparently have not been hurt by several factors in the past few years that could reduce business and revenue, including the shrinking asset pool from negative cash flow and the reduction in pension fund contributions; the Oct. 19 market crash; performance fees; increased mergers and acquisitions; plan terminations; increased use of indexing; and a trend toward defined contribution plans.

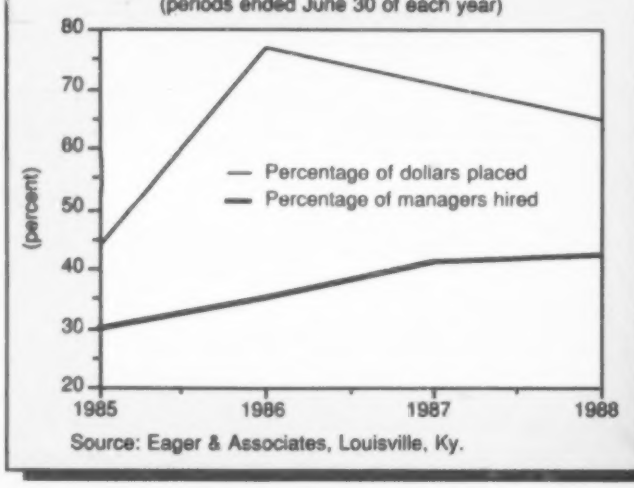
While smaller managers acknowledge this trend, they also believe there will always be a place for them in the investment market because they can provide the personal service on which small pension sponsors depend.

"Within five to seven years, megamanagers will manage very large sums of money for one client and will represent the core of the client's assets," said Ronald Golz, executive vice president of State Street Bank and Trust, Boston, with $30.5 billion under manage-

*Continued on page 32*

**Placement of assets with managers of more than $5 billion**

(periods ended June 30 of each year)




Source: Eager & Associates, Louisville, Ky.

PORTFOLIO MANAGEMENT

FEATURE

# 'Junk' tops indexed stocks

## Same risk, more reward

By James L. Sullivan

I am amazed at the amount of "credit risk" being accepted by organizations that invest in stock index funds. They invest with apparent disregard to possible exposure of severe credit deterioration of non-investment-grade issuers in the indexes.

Pension sponsors, endowment funds and other institutions that invest in equity indexes could enjoy the benefits of high-yield, or junk, bond investments without accepting any additional risk exposure.

Actually, high-yield bonds, which are issued by below-investment-grade companies, have less risk than equities issued by some of the same corporations included in indexes, such as Amdahl Corp., Andrew Corp., Pan Am Corp., Prime Computer Inc. and Coleco Industries Inc.

Coleco, for example, which filed for protection under bankruptcy law, was deleted from the Standard & Poor's 500 stock index earlier this year. Bondholders will fair better in a settlement than stockholders.

Obviously, the risk to the stock index investor is not the credit risk that confronts the bond buyer; rather, it is the potential risk of loss over time from market movements. But the comparison of the indexed stocks and their credit risk presents an interesting analogy for investors to contemplate before dismissing junk bonds as an investment.

A recent Standard & Poor's Corp. credit profile of the most widely used equity index — the S&P 500 — reveals:

- 311, or 62%, of the indexed companies have investment-grade ratings;
- 62, or 12%, have below BBB, or below-investment-grade ratings; and
- 127, or 26%, have no rating.

If one assumes half of the 127 non-rated companies would have ratings below investment grade, then a total of 125, or 25%, of the companies in the S&P 500 would have ratings below investment grade.

Such an assumption is reasonable. Fewer than half of all the

*Continued on page 14*

**James L. Sullivan is president of Sullivan Money Management, Houston.**

**Comparison of junk bond returns to other investment results**

| | 1988[1] | 1987 | 1986 | 1985 | 1984 | 1983 | 1982 | 1981 | Annual volatility[2] |
|---|---|---|---|---|---|---|---|---|---|
| First Boston junk bond index | 9.23% | 6.54% | 15.63% | 24.93% | 10.69% | 13.91% | 36.57% | 8.96% | 9.79% |
| Drexel Burnham Lambert junk bond index | 10 | 6.41 | 18.71 | 23.54 | 8.5 | 19.73 | 32.48 | 2.73 | NA |
| Shearson Lehman Hutton corporate bond index | 5.61 | 2.55 | 16.52 | 24.05 | 16.62 | 9.27 | 39.2 | 2.95 | 11.95 |
| Shearson Lehman Hutton gov't bond index | 4.27 | 2.2 | 15.31 | 20.43 | 14.5 | 7.39 | 27.75 | 9.36 | 7.9 |
| Standard & Poor's 500 stock index | 12.6 | 5.23 | 18.6 | 31.7 | 6.2 | 22.6 | 21.6 | 5 | 11.73 |

[1] First half
[2] Standard deviation of annual returns, excluding 1988
Source: Sullivan Money Management, Houston

# Fund to lend again

## Oct. 19 market crash halted program

By Barry B. Burr

CHICAGO — After abruptly shutting down the program within days of the Oct. 19 stock market crash over fear of possible losses, Morgan Stanley & Co. is planning to resume securities lending for the $7.86 billion Teamsters, Central States, Southeast & Southwest Areas Pension Fund.

"We're considering going back into it," said Robert M. Warner, the fund's director-financial operations. The fund didn't lose any money in the program.

Morgan Stanley, the fund's named fiduciary, is "actively deciding on re-entering securities lending," he added. Its executives are interviewing agents for the program.

"Mellon Bank is likely to be chosen," Mr. Warner said, the only candidate he identified. "If they aren't, they certainly are well up on the firms being considered." Pittsburgh-based Mellon, the Central States' custodian, ran the securities lending program before it was suspended.

"It was ended very quickly (after Oct. 19), within days," Mr. Warner said. "It was a Morgan Stanley decision. It was directly connected to the Oct. 19 problem."

"In the turmoil that followed Oct. 19, they (Morgan Stanley) called in securities that were out," he added. Mr. Warner said lending agreements allowed Morgan Stanley to require return of securities immediately.

He was unable to give the value of securities outstanding just before the October crash, the type lent in the program or the brokers and other borrowers of the securities.

As of Dec. 31, 1986, the latest available data, Central States had $384.6 million in securities on loan, according to the fund's annual report.

Mr. Warner was unable to say how much the fund earned in the program.

"The reason they moved out of securities lending is because of concern the market might rebound after the crash, and brokers and others who borrowed securities might not be able to cover (their collateral) when we made a call" for more collateral, he said.

Short-sellers borrow securities to sell them, hoping to buy them back later at a lower price to cover their positions and profit from the difference in the sale

*Continued on page 14*

# Stock market reaction to interest rates varies

By Barry B. Burr

Forecasts of losses in the stock market aren't necessarily consistent with a rise in interest rates, according to a new analysis.

The sensitivity of the stock market to interest rate changes isn't always symmetrical, reacting to declines in rates to the same degree it reacts to rises, it notes.

The stock market is less sensitive to rising interest rates than to falling rates, according to the analysis by Eric H. Sorensen, director-quantitative analysis, and Joseph J. Mezrich, vice president, of Salomon Brothers Inc., New York.

"There are periods in which the upward movement in earnings and/or reductions in the market risk premium may offset the negative impact of rising interest rates," they note.

The reason is that besides interest rate changes, other major factors influencing cyclical movement of the stock market are earnings accelerations or decelerations and changes in the risk premium for stocks. The risk premium is the difference in returns between stocks and risk-free securities.

The two executives analyzed quarterly returns of the Standard & Poor's 500 stock index during periods of rising and falling interest rates since 1960. As a proxy for interest rate changes, they used quarterly percentage changes in 20-year Treasury yields in the same period.

They found "the relationship between changes in interest rates and the stock market differs for periods of rising and falling rates."

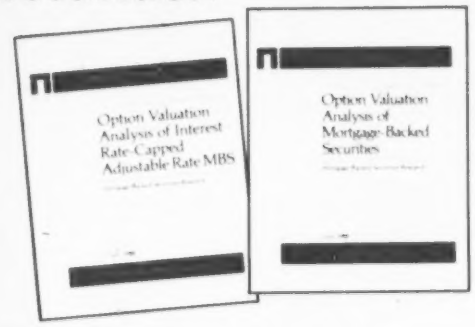
In particular, they found the relationship diverges around interest rate changes above and below −5%.

"If the quarterly interest rate decline exceeds −5%, the stock market tends to rise by 0.63% for every 1% drop in relative interest rates," they noted.

"For interest rate moves above −5%, the market responds with a 0.34% move for every 1% in-

*Continued on page 14*

Option Valuation:
The most effective method of evaluating mortgage-backed securities.




Mortgage-backed securities (MBS) have long offered attractive yields to investors. Unfortunately, they also offer substantial exposure to interest rate and prepayment risk.

Given the many variables involved, the most effective method for analyzing the risk and return characteristics of MBS is option valuation analysis. And nowhere have the complexities of option valuation been discussed with as much clarity as in these two reports offered by Kidder, Peabody.

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KIDDER, PEABODY

# 'Junk' bonds

*Continued from page 13*

hundreds of companies whose credits are evaluated have investment-grade ratings. If one assumes the non-rated companies in the S&P 500 are more typical of all the hundreds of companies whose credits are rated, rather than of only the S&P 500-rated companies, then about half of the 127 non-rated companies in the index would have ratings below investment grade.

Going through the same exercise for the Moody's Investors Service Inc.'s ratings of the S&P 500 companies, one finds:

- 284, or 57% of the companies have investment-grade ratings;
- 47, or 9%, have Baa, or below-investment-grade ratings; and
- 169, or 34%, have no rating.

Again, assuming half of the non-rated companies would have below-investment-grade ratings, then a total of 132, or 26%, of the companies in the S&P 500 would have ratings below investment grade.

Investing in the bonds issued by the 25% of the companies in the S&P 500 that have below-investment-grade ratings will involve less risk, as measured by credit risk, than investing in the equities.

The point of this analogy isn't intended as a criticism of stock indexing. But it demonstrates to index investors the investment merit of junk bonds of indexed companies and companies of similar credit standing.

Bond investors enjoy greater cash flow from the high-yield bonds than from the equities and added return of compounding interest. In the event of financial calamity, high-yield bond investors enjoy better credit standing than equity holders. Moreover, the high-yield bond market has outperformed the S&P 500 in recent years.

In the five years ended Dec. 31, high-yield bonds produced a cumulative total return of 176.5%, according to Drexel Burnham Lambert Inc.'s index on a market-value-weighted basis. By comparison, the S&P 500 returned 156.3%. On a compound annual basis, the returns were 12% and 9.3% respectively.

Because of this performance, all pension fund and endowment trustees should give consideration to using high-yield bonds in their investment programs.

For those funds that index, the argument that a pension fund cannot buy such bonds because they are below investment grade simply does not stand up to close examination. Pension funds that index already are accepting greater risk with at least 25% of the assets they have placed in stock indexing.

Trustees who approve of equity indexing establish the prima facie rationale for approving the purchase of respective fixed-income obligations of the same corporations in the index, or of companies of comparable qualities.

Index investors, in other words, ought to invest a part of their portfolios in junk bonds. They would, of course, diversify the rest of their investments among other assets, just as indexers diversify among high- and low-rated companies in the S&P 500.

Investors have gravitated toward indexing for equity performance, for its ease of execution and portfolio monitoring.

Index investors either knowingly or, more likely, unknowingly, have accepted credit risk below investment grade for their assets. They are not being compensated for that risk as they would with high-yield bonds. ■

# Interest rates

*Continued from page 13*

crease in interest rates.

"Thus, on average, when interest rates rise, the stock market is only about half as sensitive as when interest rates fall."

The study shows "the interaction between interest rates and stock prices is not linear across all possible magnitudes of interest rate moves."

"For small and modest rises (up to 10%) in interest rates, there are many quarters in which the stock market not only fails to decline, but actually rises," they say.

For interest rate rises of 5% or less, stock market declines are more rare than stock market rises. For interest rate rises of 5% to 10%, "the stock market declines only half of the time, although the up market returns are limited to very small positive amounts."

The authors attribute the asymmetry to factors not included in their analysis, namely, earnings and risk premium changes.

"When interest rates rise, nominal earnings are more likely to rise than fall," they note.

"The stock market risk premium fell from 1980 to 1988 in tandem with the secular decline in interest rates." A secular movement is long term as opposed to cyclical, short term.

They concluded "a forecast of negative returns for stocks is not necessarily consistent with a rise in interest rates. The data suggest that a 50 basis-point increase in interest rates from current levels will render a stock market rise as likely as a stock market fall." ■

# Lender

*Continued from page 13*

and purchase prices. As in the case of Central States, securities lenders require borrowers to post collateral typically worth slightly more than the market value of the securities on loan. As the securities on loan rise in price, going against the borrowers' position, lenders require the posting of additional collateral.

The Central States fund didn't sustain any losses in the program, Mr. Warner said. "We didn't lose a penny," he said.

"Morgan Stanley said that in this unsettled market, it's not a good time to have securities out on loan."

He noted the suspension of the program had nothing to do with Mellon.

Although Mellon is custodian, Mr. Warner said Morgan Stanley could select a third party for the securities lending. "A third party would have to work with Mellon to make the securities lending arrangement," he added.

He said some of the strengths Morgan Stanley is considering in an agent for the program are: the aggressiveness of its lending; the number and quality of the brokers in the program; the demand among securities borrowers; and the adequacy and control of collateral.

Mr. Warner was unable to say when Morgan Stanley would make a decision on selecting the agent. ■


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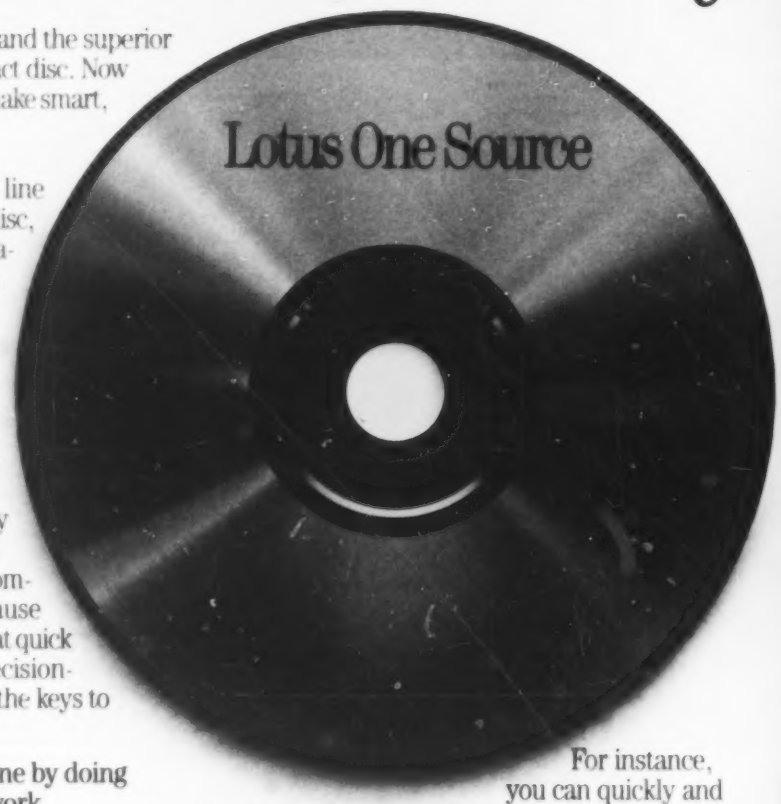


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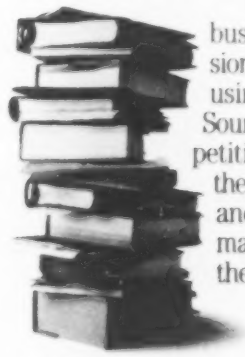

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# DIRECTORY

## Foreign clients a boon to some

Several of the firms responding to this year's real estate investment manager survey reported a significant portion of their overall business came from overseas investors.

Of the 106 firms surveyed, 38 said they had a total of $14.196 billion in assets from foreign clients. Foreign business represented about 4.6% of the $311.159 billion in total real estate assets under management.

Of the $14.196 billion in foreign business, $4.612 billion came from Japanese clients, while $8.707 billion was from non-U.S. pension funds.

For some advisers foreign business can represent a substantial part of the firm's overall business. New York-based Corporate Property Investors had total assets of $3.679 billion as of June 30, of which about $1.4 billion, or 38%, was from offshore investors.

Richard Ellis Inc., New York, with $5.067 billion in total real estate assets under management as of June 30, was among the leading U.S. advisers in terms of business from overseas clients.

As of June 30, Richard Ellis had $2.686 billion in "advisory relationships" with foreign clients. Of that total, $920 million was from two Japanese institutional clients and $1.766 billion came from non-U.S. pension funds.

David R. Hodes, senior vice president at Richard Ellis, said there were two reasons for the firm's success with foreign clients.

"In the case of our European clients, our origins as an offshoot of a British-based company may have created some name recognition," he said. And, he added, the firm has diligently marketed its services to potential clients in Japan and Europe.

Equitable Real Estate Investment Management Inc., Atlanta, with $33.705 billion in total real estate assets, had $1.282 billion in foreign business relationships as of June 30. Japanese clients account for all of the foreign business except for $50 million, which came from European and Middle Eastern investors.

Of the Japanese assets, $256 million was from Equitable Pacific Partners, a pooled fund for Japanese institutional and corporate investors; the balance was assets invested by Japanese institutions in various joint ventures with Equit-

*Continued on page P26*

# Firms' assets climb 22%

## Advisers stick to strategy

By Chuck Paustian

Tax-exempt assets run by the leading real estate investment management firms grew 21.9% during the year ended June 30, lagging the previous year's increase of 27%.

Tax-exempt institutional investors, however, barely altered their investment styles from a year ago.

A survey of 106 real estate investment firms showed total tax-exempt assets climbed to $94.579 billion as of June 30. The previous year's survey of 100 firms revealed $77.613 billion in total tax-exempt real estate assets under management.

For both years, the increase in assets was primarily the result of pension funds — especially public retirement systems — continuing to develop their real estate allocation programs. Many funds have either set or increased their target allocations for real estate investments, usually ranging from 5% to 20% of total assets.

"There's a certain lag time involved in the decision to diversify or in getting the legislative authority to diversify into real estate and other alternative asset classes," and actually investing the earmarked assets, said Robert L. Gernstetter, senior consultant with the Stratford Advisory Group, Chicago.

Among tax-exempt portfolios, real estate equity was clearly the preferred means of investing. Tax-exempt real estate equity assets rose 27.1% to $72.546 billion as of June 30 from $57.087 billion the previous year.

Tax-exempt hybrid debt assets increased 10.3% to $15.277 billion as of June 30, from $13.845 billion a year earlier; tax-exempt mortgage assets climbed 1.7% to $6.586 billion from $6.479 billion.

The interest rate environment during the past year has not favored hybrid debt financing, said Ronald A. Karp, president of Ronald A. Karp Associates Inc., Summit, N.J.

"Rates have been at a level that favors conventional financing — namely straight debt," he said. "If developers can get straight debt financing, why give away 50% of the equity," he said.

Tax-exempt investors, for the most part, have never been major mortgage lenders.

Total real estate assets managed by the 106 firms in this year's survey grew 17.3% to $311.159 billion as of June 30; the 100 firms in the previous year's survey reported total assets of $265.332 billion the previous year. The assets as of June 30 includes $155.763 billion in equity real estate, $19.223 billion in hybrid debt and $136.003 billion in mortgages.

This year's survey also showed investment managers will be searching the country for properties to buy, but the firms' investment strategies — and those of their institutional clients — remain relatively unchanged from the previous year.

- Of the 50 largest real estate managers, 27 will be focusing on acquisitions; all the firms in the survey have almost $14 billion to invest.
- Tax-exempt investors continue to invest the bulk of their assets through commingled funds rather than through separate accounts.
- The property mix of the tax-exempt portfolios and the amount of money invested in development deals, rather than in existing properties, showed little, if any, change from the previous year.

Most of the 50 largest real estate managers will be concentrating on acquiring new properties for their tax-exempt institutional clients. In the previous year's survey, less than half of the top 50 firms said acquisitions would be their primary focus.

"The decision to place a lot of emphasis on the deal side (of the business) is a function of the amount of capital the manager has to invest," Mr. Gernstetter said.

Mr. Karp said the managers may be feeling some pressure to get the assets invested in the market. "The manager knows if he gets (the money) invested, he has a revenue stream for some time. If he doesn't get it invested, anything could change."

He said a pension fund's actuarial needs could be altered, the client might opt for a more aggressive manager or an investor could simply choose another asset class. "If you look at the last five years, real estate has underperformed stocks and bonds," he added.

Other managers will focus on improving the portfolios already acquired. Fifteen advisers of the top 50 said their primary emphasis will be on rehabilitation and/or asset management of existing properties.

In fact, the 106 firms responding to this year's survey reported they expect to spend $1.52 billion on rehabilitation, renovation, expansion or modernization of existing properties during 1988.

Tax-exempt institutions appear to be in a holding pattern regarding the means through which they implement their real estate investment programs.

Of the $94.342 billion in tax-exempt assets that were broken out between commingled funds and separate accounts, $52.135 million, or 55.3%, was in pooled funds, while $42.207 billion, or 44.7%, was in separate accounts.

Of the total $77.6 billion of tax-exempt assets in the previous year's survey 54.6%, was in commingled funds, while 45.4%, was in direct accounts.

The property mix of the managers' tax-exempt portfolios also showed little change.

Managers responding to this year's survey reported 37% of their tax-exempt assets in office properties; 21% in retail; 19% industrial; 9% multifamily housing; 2% hotels or resorts; and 12% other, which includes land and mixed-use investments.

According to last year's survey, the tax-exempt property mix was 39% office; 20% retail; 18% industrial; 9% multifamily housing; 2% hotels or resorts; 3% land; 2% mixed-use; and 7% other.

In addition, although the actual dollar amount invested by tax-exempt investors in development projects increased, the percentage of total tax-exempt assets invested in such deals, 11%, remained unchanged.

Paul Saint-Pierre, managing director of Pension Realty Advisors, San Francisco, said the differences between the findings of this year's survey and those of a year ago, though small, are indicative of the changing nature of tax-exempt institutional investors.

"If one category changes one percentage point of two percentage points, that's a lot," he said. "There has to be a fair amount of money pouring into that sector for that to change."

As for the percentage of assets invested in commingled funds vs. separate accounts, he said several managers have introduced specialized pooled funds. "That's really placating investor interest," he said.

For example, "if there is an industrial commingled fund, then an investor doesn't have to hire a (separate account) manager to do it."

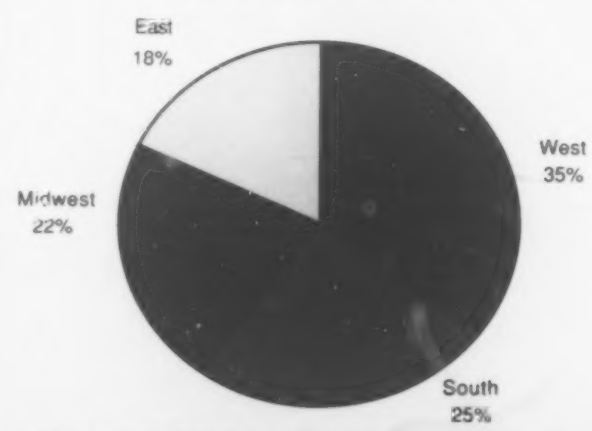
There were changes, however, among the top 10 rankings of real estate investment managers for all categories surveyed.

Among the largest real estate managers of tax-exempt assets, Copley Real Estate Advisors, Boston, and JMB Institutional Realty Corp., Chicago, vaulted ahead of other managers, primarily because of their participation in the $6.7 billion acquisition of Cadillac Fairview Corp. by Chicago-based JMB Realty Corp., an affiliate of JMB Institutional.

Copley finished first after being ranked fifth in last year's survey, while JMB Institutional placed third, up from ninth.

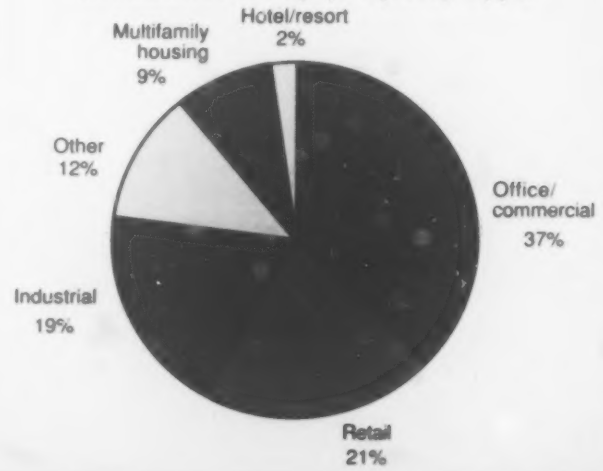
*Continued on page P26*

### Investments by region*




*Based on the FRC Property Index's geographic locations

### Investments by property type



## Real estate investment advisers ranked by tax-exempt assets

| | | Tax-exempt assets ($ mils.) | | | | Total assets ($ mils.) | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | Total | Equity | Hybrid debt | Mortgages | Total taxable/ tax-exempt | Equity | Hybrid debt | Mortgages |
| 1. | Copley Real Estate Advisors ** | 8,698 | 8,698 | — | — | 12,099 | 12,099 | — | — |
| 2. | Equitable Real Estate Investment Mgmt. | 8,318 | 7,712 | 169 | 437 | 33,705 | 22,683 | 1,804 | 9,218 |
| 3. | JMB Institutional Realty | 6,800 | 6,800 | — | — | 21,500 | 21,500 | — | — |
| 4 | Prudential Realty Group | 5,171 | 4,740 | 220 | 211 | 37,813 | 14,695 | 220 | 22,898 |
| 5. | Heitman Advisory | 4,881 | 4,881 | — | — | 5,153 | 5,153 | — | — |
| 6. | Aetna Life and Casualty | 4,689 | 3,505 | 1,130 | 54 | 26,823 | 4,857 | 1,130 | 20,836 |
| 7 | RREEF | 3,072 | 3,072 | — | — | 3,495 | 3,495 | — | — |
| 8. | Aldrich, Eastman & Waltch | 2,573 | 545 | 1,800 | 228 | 2,645 | 617 | 1,800 | 228 |
| 9. | Boston Co. Real Estate Counsel | 2,390 | 660 | 1,730 | — | 2,390 | 660 | 1,730 | — |
| 10 | Richard Ellis | 2,381 | 2,175 | 206 | — | 5,067 | 4,861 | 206 | — |
| 11. | F.I.A. Associates | 2,340 | 1,167 | 1,012 | 161 | 2,340 | 1,167 | 1,012 | 161 |
| 12. | TCW Realty Advisors | 2,285 | 1,832 | 453 | — | 2,285 | 1,832 | 453 | — |
| 13. | LaSalle Advisors | 2,216 | 2,216 | — | — | 2,216 | 2,216 | — | — |
| 14 | Corporate Property Investors | 2,151 | 2,151 | — | — | 3,679 | 3,679 | — | — |
| 15. | Balcor Institutional Realty Advisors | 1,852 | 353 | 1,499 | — | 7,000 | 5,000 | 2,000 | — |
| 16. | CIGNA Asset Advisers | 1,728 | 1,470 | 258 | — | 12,790 | 2,613 | 258 | 9,919 |
| 17 | J.P. Morgan Investment Mgmt. | 1,344 | 377 | 967 | — | 1,475 | 404 | 1,071 | — |
| 18 | McMorgan | 1,300 | 400 | 100 | 800 | 1,300 | 400 | 100 | 800 |
| 19 | Lehndorff & Babson Real Estate Counsel | 1,253 | 1,253 | — | — | 2,400 | 2,400 | — | — |
| 20 | Mellon Real Estate Investment Mgmt. | 1,220 | 586 | 385 | 249 | 1,220 | 586 | 385 | 249 |
| 21 | Sentinel Real Estate | 1,218 | 1,218 | — | — | 1,436 | 1,436 | — | — |
| 22 | Latimer & Buck | 1,213 | — | 562 | 651 | 1,213 | — | 562 | 651 |
| 23 | Jones Lang Wootton Realty Advisors | 1,200 | 800 | 400 | — | 1,200 | 800 | 400 | — |
| 24 | First Chicago Investment Advisors | 995 | 983 | — | 12 | 1,039 | 1,027 | — | 12 |
| 25 | Coldwell Banker Capital Mgmt Services | 968 | 925 | 43 | — | 968 | 925 | 43 | — |
| 26 | Lomas Advisors | 925 | — | 755 | 170 | 925 | — | 755 | 170 |
| 27 | O'Connor Group | 902 | 797 | 105 | — | 1,170 | 1,065 | 105 | — |
| 28 | Alex. Brown Realty Advisors | 882 | 40 | 813 | 29 | 1,284 | 40 | 1,215 | 29 |
| 29 | Wells Fargo Realty Advisers | 850 | 219 | 296 | 335 | 971 | 340 | 296 | 335 |
| 30 | L.J. Melody | 838 | — | 453 | 385 | 1,992 | — | 665 | 1,327 |
| 31 | PSI Institutional Realty | 812 | 812 | — | — | 2,400 | 2,400 | — | — |
| 32 | Kennedy Associates Real Estate Counsel | 796 | 486 | 291 | 19 | 796 | 486 | 291 | 19 |
| 33 | Metropolitan Life | 774 | 714 | — | 60 | 23,920 | 9,364 | — | 14,556 |
| 34 | Property Capital Associates | 770 | 770 | — | — | 770 | 770 | — | — |
| 35 | Eastdil Realty | 765 | 705 | 27 | 33 | 1,090 | 705 | 27 | 358 |
| 36 | First Wachovia | 708 | 602 | 39 | 67 | 708 | 602 | 39 | 67 |
| 37 | MIG Realty Advisors | 705 | 369 | 224 | 112 | 705 | 369 | 224 | 112 |
| 38 | NCNB National Bank | 629 | 537 | 92 | — | 629 | 537 | 92 | — |
| 39 | Citicorp Investment Mgmt. | 628 | 278 | 34 | 316 | 773 | 423 | 34 | 316 |
| 40 | First Interstate Mortgage | 585 | 35 | 50 | 500 | 585 | 35 | 50 | 500 |
| 41 | John Hancock Properties | 570 | 570 | — | — | 2,139 | 2,139 | — | — |
| 42 | Karsten Institutional Realty Advisors | 565 | 468 | 6 | 91 | 767 | 670 | 6 | 91 |
| 43 | Cabot, Cabot & Forbes Realty Advisors | 500 | 500 | — | — | 500 | 500 | — | — |
| 44 | August-Am Cal Advisors | 465 | 186 | — | 279 | 871 | 250 | — | 621 |
| 45 | State Street Bank and Trust * | 455 | 213 | 139 | — | 455 | 213 | 139 | — |
| 46 | Travelers | 449 | 405 | — | 44 | 19,803 | 1,569 | — | 18,234 |
| 47 | McMahan Real Estate Advisors | 438 | 329 | 109 | — | 556 | 417 | 139 | — |
| 48 | Union Labor Life Insurance | 413 | — | — | 413 | 887 | — | — | 887 |
| 49 | Schroder Real Estate Associates | 411 | 411 | — | — | 1,300 | 1,294 | — | 6 |
| 50 | Chesterton International | 383 | 288 | 91 | 4 | 383 | 288 | 91 | 4 |
| 51 | ASB Capital Mgmt. | 361 | 37 | — | 324 | 361 | 37 | — | 324 |
| 52 | Bennett & Kahnweiler Realty Advisors | 335 | 220 | 115 | — | 435 | 320 | 115 | — |
| 53 | Phoenix * | 320 | 70 | 190 | — | 320 | 70 | 190 | — |
| 54 | Hancock Timber Resources Group | 312 | 305 | — | 7 | 472 | 321 | — | 151 |
| 55 | Principal | 293 | 118 | — | 175 | 9,592 | 318 | — | 9,274 |
| 56 | FS Realty Partners * | 286 | 224 | 55 | 7 | 286 | 224 | 55 | 7 |
| 57 | PMRealty Advisors | 285 | 285 | — | — | 560 | 560 | — | — |
| 58 | Sierra Capital Realty Advisors | 263 | 263 | — | — | 440 | 440 | — | — |
| 59 | Metric Institutional Realty Advisors | 230 | 174 | 30 | 26 | 2,016 | 1,960 | 29 | 27 |
| 60 | Bank of Boston Real Estate * | 224 | 171 | 53 | — | 224 | 171 | 53 | — |
| 61 | Woodmont Realty Advisors | 200 | 200 | — | — | 200 | 200 | — | — |
| 62 | Trident/Meyer Real Estate Advisors | 194 | 147 | 47 | — | 194 | 147 | 47 | — |
| 63 | Equitec Institutional Realty Advisers | 180 | 180 | — | — | 1,800 | 1,800 | — | — |
| 64 | Piedmont Realty Advisors | 178 | 106 | 72 | — | 1,030 | 237 | 793 | — |
| 65 | Trinity Advisors | 158 | 158 | — | — | 158 | 158 | — | — |
| 66 | Loeb Partners Realty | 150 | 150 | — | — | 700 | 700 | — | — |
| 67 | NCNB Texas | 150 | 150 | — | — | 150 | 150 | — | — |
| 68 | Landauer Advisors | 128 | 128 | — | — | 767 | 508 | 259 | — |
| 69 | Grubb & Ellis | 128 | 101 | 24 | 3 | 628 | 601 | 24 | 3 |
| 70 | Griffin Capital | 119 | 14 | 5 | 100 | 119 | 14 | 5 | 100 |
| 71 | Angeles Institutional Advisors | 109 | 86 | — | 23 | 1,250 | 1,173 | — | 77 |
| 72 | Rocky Mountain Investors | 105 | 15 | — | 90 | 105 | 15 | — | 90 |
| 73 | Acquest Capital Mgmt. | 102 | 12 | 83 | 7 | 145 | 12 | 110 | 23 |
| 74 | Lieberman | 100 | 80 | — | 20 | 100 | 80 | — | 20 |
| 75 | Wellington Real Estate | 100 | — | 100 | — | 100 | — | 100 | — |
| 76 | Mutual Benefit Life | 94 | 27 | — | 67 | 5,437 | 258 | — | 5,179 |
| 77 | T. Rowe Price Realty Advisers | 90 | 90 | — | — | 250 | 233 | 17 | — |
| 78 | D.A. Management | 84 | 55 | 20 | 9 | 84 | 55 | 20 | 9 |
| 79 | Tomlin Properties | 80 | 80 | — | — | 584 | 584 | — | — |
| 80 | NBS Realty Advisors | 78 | 73 | — | 5 | 78 | 73 | — | 5 |
| 81 | First Asset Realty Advisors | 77 | 77 | — | — | 77 | 77 | — | — |
| 82 | H.D. McNee Realty Advisers | 72 | 9 | — | 63 | 72 | 9 | — | 63 |
| 83 | Campbell Group | 66 | 66 | — | — | 66 | 66 | — | — |
| 84 | Massachusetts Mutual Life Insurance | 63 | 63 | — | — | 5,320 | 363 | — | 4,957 |
| 85 | MRealty | 62 | 62 | — | — | 330 | 328 | — | 2 |
| 86 | Hayden,Tolzmann & Associates | 60 | 60 | — | — | 60 | 60 | — | — |
| 87 | McKinley Associates | 50 | 25 | 25 | — | 550 | 500 | 50 | — |
| 88 | Southport Financial | 40 | 40 | — | — | 306 | 242 | — | 64 |
| 89 | United Trust Fund | 40 | 40 | — | — | 180 | 180 | — | — |
| 90 | Harris Trust & Savings Bank | 37 | 37 | — | — | 37 | 37 | — | — |
| 91 | Garrett Realty Advisors | 35 | 35 | — | — | 35 | 35 | — | — |
| 92 | Forest Investment Associates | 31 | 31 | — | — | 53 | 53 | — | — |
| 93 | American Agricultural Investment Mgmt. | 12 | 12 | — | — | 21 | 21 | — | — |
| 94 | Centerre Trust Co. of St. Louis (M) | 12 | 12 | — | — | 12 | 12 | — | — |
| 95 | First Wisconsin Trust | 9 | 9 | — | — | 9 | 9 | — | — |
| 96 | Mercantile Bank | 8 | 8 | — | — | 8 | 8 | — | — |
| 97 | Campbell Kunz Management * | 7 | — | — | — | 7 | — | — | — |
| 98 | John Hancock Financial Services | — | — | — | — | 10,802 | — | — | 10,802 |
| 99 | Equitable Agri-Business | — | — | — | — | 2,022 | 130 | — | 1,892 |
| 100 | Morguard Investments | — | — | — | — | 1,350 | 1,350 | — | — |
| 101 | AMB Investments | — | — | — | — | 538 | 538 | — | — |
| 102 | Agrivest | — | — | — | — | 419 | 75 | 14 | 330 |
| 103 | Jacques & Kurdziel | — | — | — | — | 300 | 300 | — | — |
| 104 | Penreal Advisors | — | — | — | — | 193 | 193 | — | — |
| 105 | Standard Asset Managers | — | — | — | — | 184 | 184 | — | — |
| 106 | Farmvest | — | — | — | — | 5 | 5 | — | — |
| | TOTAL | 94,579 | 72,546 | 15,277 | 6,586 | 311,159 | 155,763 | 19,223 | 136,003 |

(M) - manager of managers; assets not included in totals
* - other assets included in total
** - data as of March 31, 1988

### Aetna Life and Casualty Co.

151 Farmington Ave., Hartford, Conn. 06156; (203) 636-6254

| | |
|---|---|
| Tax-exempt real estate assets | $4.689 million |
| Equity | $3.505 million |
| Hybrid debt | $1.130 million |
| Mortgages | $54 million |
| Commingled or pooled funds | |
| Equity | $2.806 million |
| Hybrid debt | $1.112 million |
| Direct, separate accounts | |
| Equity | $699 million |
| Hybrid debt | $18 million |
| Mortgages | $54 million |
| Total real estate assets | $26.823 million |
| Equity | $4.857 million |
| Hybrid debt | $1.130 million |
| Mortgages | $20.836 million |

As of June 30, the tax-exempt equity assets of Aetna Life and Casualty Co. had a market value of $2.47 billion. Contributions received but not invested were $207 million; contributions committed but not received were $828 million.

The hybrid debt holdings had a market value of $960 million. Contributions received but not invested were $170 million. The market value of the mortgages was $36 million. Contributions received but not invested were $1 million, contributions committed but not received were $17 million.

Of tax-exempt general account assets, $15.588 billion was in mortgages.

For tax-exempt assets, the mix by property type was 3.7% hotel/resort; 22.8% industrial; 18.5% multifamily housing; 38% office/commercial; 15.6% retail; 1.4% single family.

The total tax-exempt property portfolio is located 41.6% in the West; 13.8% Midwest; 21.6% East; 23% South.

Aetna expects to be a net buyer in the East, West and Midwest regions and a net seller in the South region.

The firm expects to be a net buyer of retail, industrial, apartments and single-family properties and a net seller of offices.

Aetna expects to spend $250 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The main area of concentration during the year will be rehabilitation and asset management of existing properties.

Aetna offers open-end and closed-end commingled funds, including closed-end specialty accounts, open-end participating mortgage accounts, single property and individual separate accounts.

The Real Estate Separate Account, an open-end fund has invested $1.622 billion and received but not invested $179.3 million for 270 participants. The fund makes equity investments through forward commitments or by acquiring new, substantially leased properties. The account is diversified by property type and region.

The Participating Mortgage Separate Account, an open-end fund, has invested $898.7 million and received but not yet invested $127.2 million from 287 participants. The fund makes participating mortgage investments in existing, well-leased properties or to-be-built properties through forward commitments. The fund focuses on retail, industrial and apartments in the Northeast and West.

The Union Separate Account, an open-end fund, has invested $43 million; contributions received, not invested are $43 million. The fund uses participating mortgages to invest in newer, institutional-quality properties that are union built.

The Closed End Real Estate Separate Account I has invested $166.5 million; $3.5 million is not yet invested.

CERESA II has invested $102.8 million; $1.7 million is received but not yet invested.

Apartment Development Fund I, a closed-end fund, has invested $219.4 million; $10.3 million is received but not invested; $170.3 million is committed but not received. The fund makes equity investments in to-be-built apartments.

Aetna Institutional Investors I Limited Partnership, a closed-end fund, has invested $19.2 million; $400,000 is received but not invested; $80.4 million is committed but not received. The joint venture partnership fund will invest in apartment complexes, retail centers and industrial buildings in the Northeast, Midwest, West and Northwest.

Retail Development Fund, a closed-end fund, is open for subscription. The fund will make equity investments in retail properties with emphasis on the Northeast, Midwest and West.

A subsidiary is Aetna Realty Investors Inc.

William M. Russell, senior vice president-equity and Blake W. Irons, senior vice president-mortgage financing, are in charge of making property investments. John E. Arant, vice president-financial services, employee benefits division, is client contact.

### Aldrich, Eastman & Waltch

265 Franklin St., Boston, Mass. 02110; (617) 439-9000

| | |
|---|---|
| Tax-exempt real estate assets | $2.573 million |
| Equity | $545 million |
| Hybrid debt | $1.800 million |
| Mortgages | $228 million |
| Direct, separate accounts | |
| Equity | $545 million |


Karsten Realty Advisors

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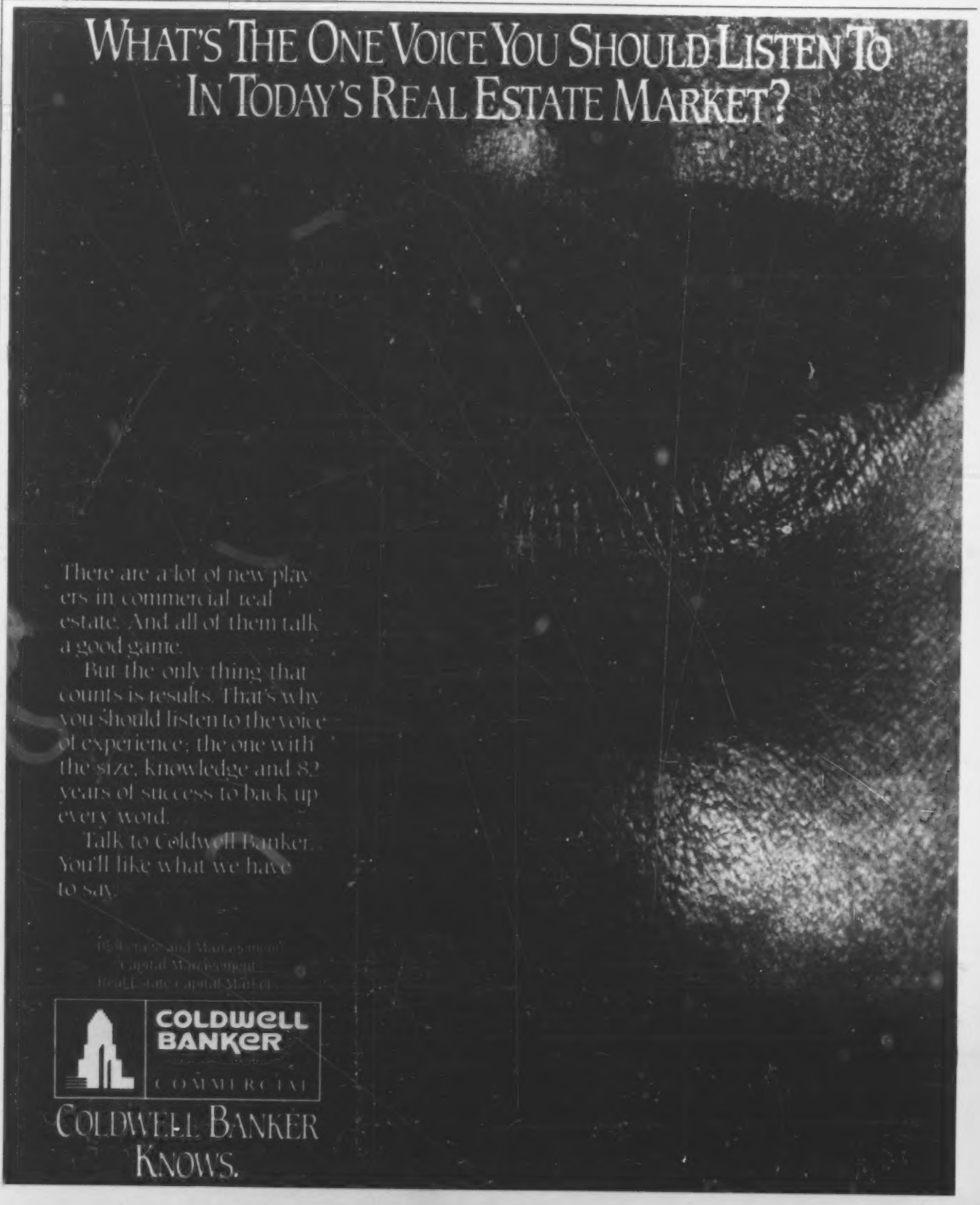


| | |
|---|---|
| Hybrid debt | $1,800 million |
| Mortgages | $228 million |
| Total real estate assets | $2,645 million |
| Equity | $617 million |
| Hybrid debt | $1,800 million |
| Mortgages | $228 million |

As of June 30, the tax-exempt equity assets of Aldrich, Eastman & Waltch Inc. had a market value of $545 million.

The hybrid debt holdings had a market value of $1.8 billion. The market value of the mortgages was $228 million.

For tax-exempt assets, the mix by property type was 1% hotel/resort; 11% industrial; 2% multifamily housing; 32% office/commercial; 37% retail; 17% development.

The total tax-exempt property portfolio is located 32% in the West; 18% Midwest; 34% East; 16% South.

Aldrich, Eastman & Waltch has management responsibility for five closed-end funds offered by State Street Bank with assets of $352 million at June 30. Aldrich, Eastman & Waltch is also the manager for State Street Bank's open-end Real Estate Fund VI.

Aldrich, Eastman & Waltch offers closed-end funds, advisory and discretionary separate accounts and specialized investment funds.

Investment clients include General Motors, Digital Equipment, Connecticut and Iowa.

Seven principals are in charge of making property investments. Robert J. Hannan, vice president, is client contact.

## August-Am Cal Advisors Inc.

4730 Woodman Ave., Sherman Oaks, Calif. 91423; (818) 990-3250

| | |
|---|---|
| Tax-exempt real estate assets | $465 million |
| Equity | $186 million |
| Mortgages | $279 million |
| Direct, separate accounts | |
| Equity | $186 million |
| Mortgages | $279 million |
| Total real estate assets | $871 million |
| Equity | $250 million |
| Mortgages | $621 million |

As of June 30, the tax-exempt equity assets of August-Am Cal Advisors Inc. had a market value of $160 million. Contributions received but not invested were $26 million.

The market value of the mortgages was $240 million; contributions received but not invested were $35 million; contributions committed but not received were $4 million.

For tax-exempt assets, the mix by property type was 10% hotel/resort; 16% industrial; 30% multifamily housing; 24% office/commercial; 18% retail; senior housing 2%.

The total tax-exempt property portfolio is located 66% in the West; 10% Midwest; 4% East; 20% South.

August-Am Cal expects to be a net buyer in all regions.

The firm expects to be a net buyer of industrial, warehouse and shopping center properties.

The main area of concentration during the year will be acquisitions.

August-Am Cal offers direct separate accounts, development financing and open-end funds.

August-Am Cal offers the Building for America Fund and Am Cal Group Trust I. Both funds are new; no contributions had been received as of June 30.

The BAF fund will invest in apartment complexes; the AGT fund will make forward loan commitments on income-producing properties.

Investment clients include Hawaii Development Foundation, Southern Electrical, New Mexico PIPE Trades, Sheet Metal Workers of Southern California, Arizona and Nevada.

The parent company is August Financial Corp.

William Dawson, vice president; David Brown, vice president-acquisitions; and Catherine Duggan, senior vice president-mortgages, are in charge of making property investments. S.Q. DellaGrotta, executive vice president, is client contact.

PIPER real estate report in Dec. 12 issue of *Pensions & Investment Age*.

## Balcor Institutional Realty Advisors Inc.

4849 Golf Road, Skokie, Ill. 60077; (312) 676-7778

| | |
|---|---|
| Tax-exempt real estate assets | $1,852 million |
| Equity | $353 million |
| Hybrid debt | $1,499 million |
| Commingled or pooled funds | |
| Equity | $316 million |
| Hybrid debt | $1,462 million |
| Direct, separate accounts | |
| Equity | $37 million |
| Hybrid debt | $37 million |
| Total real estate assets | $7,000 million |
| Equity | $5,000 million |
| Hybrid debt | $2,000 million |

As of June 30, the tax-exempt equity assets of Balcor Institutional Realty Advisors Inc. had a market value of $316 million. Contributions committed but not received were $37 million.

The hybrid debt holdings had a market value of $1.462 billion. Contributions committed but not received were $37 million.

For tax-exempt assets, the mix by property type was 1% hotel/resort; 6% industrial; 60% multifamily housing; 15% office/commercial; 15% retail; 3% mobile homes.

The total tax-exempt property portfolio is located 12% in the West; 15% Midwest; 13% East; 60% South.

Balcor expects to be a net buyer in all regions.

The firm expects to be a net buyer of multifamily, retail, specialty, mobile home parks and hotel properties and a net seller of office properties.

The main area of concentration during the year will be on acquisitions.

Balcor offers closed-end funds and direct investment accounts.

The Balcor Institutional Apartment Fund is open for subscription. Contributions received, but not invested, for the limited partnership fund are $10 million. The fund makes all-cash equity investments in luxury garden apartment communities in major metropolitan markets.

The State of Connecticut is an investment client. Japanese clients include Misawa Homes and Orient Finance.

The parent company is The Balcor Co.

Richard Stern, senior vice president, is in charge of making property investments. Ronald Gold, senior vice president, is client contact.

## The Boston Co. Real Estate Counsel Inc.

1 Boston Place, Boston, Mass. 02106; (617) 722-7102

| | |
|---|---|
| Tax-exempt real estate assets | $2,390 million |
| Equity | $660 million |
| Hybrid debt | $1,730 million |
| Commingled or pooled funds | |
| Equity | $68 million |
| Hybrid debt | $75 million |
| Direct, separate accounts | |
| Equity | $592 million |
| Hybrid debt | $1,655 million |
| Total real estate assets | $2,390 million |

As of June 30, the tax-exempt equity assets of The Boston Co. Real Estate Counsel Inc. had a market value of $660 million.

The hybrid debt holdings had a market value of $1.686 billion. Contributions received but not invested were $13 million; contributions committed but not received were $31 million.

For tax-exempt assets, the mix by property type was 7% industrial; 8% multifamily housing; 60% office/commercial; 16% retail; 3% research and development; and 6% mixed use.

The total tax-exempt property portfolio is located 28% in the West; 17% Midwest; 43% East; 12% South.

The Boston Co. expects to be a net buyer in all regions.

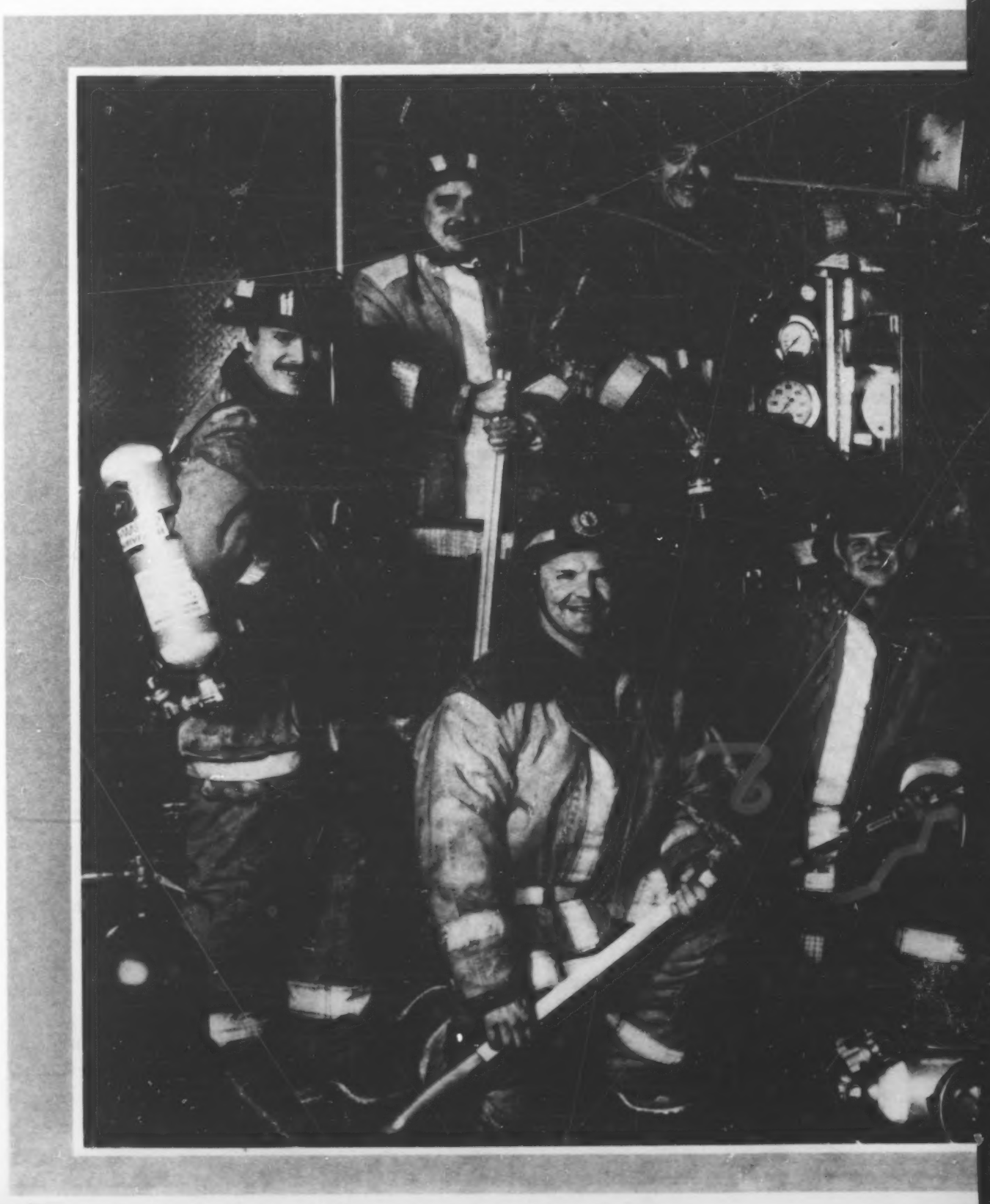
The firm expects to be a net buyer of industrial, apartment, office and retail properties.

The firm's main area of concentration during the year will be on acquisitions, particularly equity-oriented debt.

The Boston Co. Real Estate Counsel offers closed-end funds and separate accounts.

The firm offers the TBCREC Residential Fund I, a closed-end fund. Of the $75 million in contributions, $31 million is not invested. The fund is a group trust investing in apartments through participating mortgages and joint ventures.

Investment clients include Texas Teachers, General Motors, AT&T and



United Technologies.

The parent company is The Boston Co. Inc.

Mary L. Johnston, executive vice president, is in charge of making property investments. Robert A. Radloff, president, is client contact.

### Alex. Brown Realty Advisors

2 N. Charles St., Baltimore, Md. 21201; (301) 783-3200

| | |
|---|---|
| Tax-exempt real estate assets | $882 million |
| Equity | $40 million |
| Hybrid debt | $813 million |
| Mortgages | $29 million |
| Commingled or pooled funds | |
| Equity | $10 million |
| Direct, separate accounts | |
| Equity | $30 million |
| Hybrid debt | $813 million |
| Mortgages | $29 million |
| Total real estate assets | $1,284 million |
| Equity | $40 million |
| Hybrid debt | $1,215 million |
| Mortgages | $29 million |

As of June 30, the tax-exempt equity assets of Alex. Brown Realty Advisors had a market value of $28.2 million. Contributions committed but not received were $11.5 million.

The hybrid debt holdings had a market value of $529.2 million. Contributions committed but not received were $283.7 million. The market value of the mortgages was $29.6 million.

For tax-exempt assets, the mix by property type was 16.1% hotel/resort, 3.1% industrial; 2.3% multifamily housing; 62.2% office/commercial; 14.2% retail, 2.1% other.

The total tax-exempt property portfolio is located 33.2% in the West; 11.1% Midwest; 11.7% East; 43% South; 1% Canada.

Alex. Brown expects to be a net buyer in the East and West.

The firm expects to be a net buyer of light industrial/warehouse, neighborhood retail and office properties.

Its main area of concentration during the year will be acquisitions.

Alex. Brown offers closed-end funds, separate accounts, real estate security placements and private placements.

The firm offers the Atlantic Coast Fund, a closed-end fund with a tentative closing date of Dec. 31, 1989. The firm had received $10 million in commitments as of June 30. The fund will acquire 100% equity positions in primarily existing, seasoned properties in the East. Diversification is by market and property type, with an emphasis on light industrial, warehouse, neighborhood retail and office properties.

The parent company is Alex. Brown & Sons.

Philip C. Iglehart and Robert H. Gidel, managing directors, are in charge of making property investments. Mahlon Apgar IV, director, is client contact.

### Cabot, Cabot & Forbes Realty Advisors Inc.

60 State St., Boston, Mass. 02109; (617) 722-8200

| | |
|---|---|
| Tax-exempt real estate assets | $500 million |
| Equity | $500 million |
| Direct, separate accounts | |
| Equity | $500 million |
| Total real estate assets | $500 million |

As of June 30, the tax-exempt equity assets of Cabot, Cabot & Forbes Realty Advisors Inc. had a market value of $60 million. Contributions committed but not received were $440 million.

For tax-exempt assets, the mix by property type was 68% industrial and 32% office/commercial.

The total tax-exempt property portfolio is located 31% in the West; 37% Midwest; 32% East.

Cabot, Cabot & Forbes Realty expects to be a net buyer in all regions. The firm expects to be a net buyer of industrial and office properties.

The firm expects to spend $10.7 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The firm's main area of concentration during the year will be acquisitions.

The firm offers separate accounts to tax-exempt clients.

Investment clients include BellSouth, IBM, Kodak and Shell.

The parent company is Cabot, Cabot & Forbes. Its subsidiaries are CC&F Asset Management Co. Inc. and Aberthaw Construction Co.

Robert E. Patterson, executive vice president, is in charge of making property investments. Robert M. Angland, executive vice president, is client contact.

### Chesterton International

630 Fifth Ave., Suite 3170, New York, N.Y. 10111; (212) 765-1540

| | |
|---|---|
| Tax-exempt real estate assets | $383 million |
| Equity | $288 million |
| Hybrid debt | $91 million |
| Mortgages | $4 million |
| Commingled or pooled funds | |
| Equity | $82 million |
| Direct, separate accounts | |
| Equity | $206 million |
| Hybrid debt | $91 million |
| Mortgages | $4 million |
| Total real estate assets | $383 million |

As of June 30, the tax-exempt equity assets of Chesterton International had a market value of $191 million. Contributions received but not invested were $3 million; contributions committed but not received were $94 million.

The hybrid debt holdings had a market value of $29 million. Contributions committed but not received were $62 million. The market value of the mortgages was $4 million.

For tax-exempt assets, the mix by property type was 21% industrial; 51% office/commercial; 28% retail.

The total tax-exempt property portfolio is located 26% in the West; 14% Midwest; 37% East; 23% South.

Chesterton expects to be a net buyer in the West, Midwest and East and a net seller in the South.

The firm expects to be a net buyer of retail and industrial properties and a net seller of office properties.

Chesterton expects to spend $3.5 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The firm's main area of concentration during the year will be acquisitions.

Chesterton offers direct separate accounts and investment trusts.

Investment clients include Deansbank Investments and CC Property Investments.

The parent company is Chesterton International (U.K.). Its subsidiaries are in Singapore, Australia and Hong Kong.

George R. Fryer Jr., chief investment officer, is in charge of making property investments. James J. Brinkerhoff, president, is client contact.

### CIGNA Asset Advisers Inc.

Hartford, Conn. 06152; (203) 726-6000

| | |
|---|---|
| Tax-exempt real estate assets | $1,728 million |
| Equity | $1,470 million |
| Hybrid debt | $258 million |
| Commingled or pooled funds | |
| Equity | $1,345 million |
| Direct, separate accounts | |
| Equity | $125 million |
| Hybrid debt | $258 million |
| Total real estate assets | $12,790 million |
| Equity | $2,613 million |
| Hybrid debt | $258 million |
| Mortgages | $9,919 million |

As of June 30, the tax-exempt equity assets of CIGNA Asset Advisers Inc. had a market value of $1.256 billion. Contributions received but not invested were $116 million; contributions committed but not received were $98 million.

The hybrid debt holdings had a market value of $57 million. Contributions received but not invested were $1 million; contributions committed but not received were $200 million.

Of tax-exempt general account assets, $8 million was invested in mortgages.

For tax-exempt assets, the mix by property type was 8.6% hotel/resort; 2% industrial; 8.6% multifamily housing; 30.9% office/commercial; 23.1% retail; 21.6% research and development; 3.4% mixed use; and 1.8% land.

The total tax-exempt property portfolio is located 21.3% in the West; 18.3% Midwest; 10.1% East; 50.3% South.

CIGNA expects to be a net buyer in the West, East and South regions.

The firm expects to be a net buyer of retail and apartment properties and a net seller of offices.

CIGNA expects to spend $55 million on rehabilitation, renovation, ex-

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pansion or modernization of existing properties in 1988.

The firm's main area of concentration during the year will be on the rehabilitation/asset management of existing properties.

CIGNA offers open-end and closed-end real estate accounts; limited partnership for public plans, foundations and endowments; direct individual account management; single properties.

Separate Account R is an open-end equity real estate separate account for qualified pension plans. The fund has $809.7 million in assets, of which $52 million is not invested. Another $17 million is committed, but not received. There are 425 participants. The fund invests via equity, construction loans and joint ventures in moderate-size, existing and to-be-built suburban offices, shopping centers, industrial properties, hotels and apartments. Leverage may be used to takeover existing mortgages.

Fund T is a closed-end limited partnership with $47.4 million in assets. Of that amount, $31.3 million has yet to be invested. Another $9 million is committed but not received. The fund invests in retail, industrial, R&D, apartment and office properties needing rehabilitation or other changes.

CERF II is a closed-end equity account with $19.2 million to be invested. The fund invests in retail, industrial, R&D, apartment and office properties needing rehabilitation or other changes.

Investment clients include New York State Common, United Technologies, United Methodist Church and Connecticut.

The parent company is CIGNA Corp. CIGNA Investments Inc. is a subsidiary.

David R. Johnson, senior vice president, is in charge of making property investments. William E. Chapman II, president, is client contact.

## Citicorp Real Estate Investment Management

153 E. 53rd St., New York, N.Y. 10043; (212) 559-9332

| | |
|---|---|
| Tax-exempt real estate assets | $628 million |
| Equity | $278 million |
| Hybrid debt | $34 million |
| Mortgages | $316 million |
| Commingled or pooled funds | |
| Equity | $130 million |
| Hybrid debt | $34 million |
| Mortgages | $274 million |
| Direct, separate accounts | |
| Equity | $148 million |
| Mortgages | $42 million |
| Total real estate assets | $773 million |
| Equity | $423 million |
| Hybrid debt | $34 million |
| Mortgages | $316 million |

As of June 30, the tax-exempt equity assets of Citicorp Real Estate Investment Management had a market value of $149 million. Contributions received but not invested were $74 million; contributions committed but not received were $55 million.

The hybrid debt holdings had a market value of $34 million. The market value of the mortgages was $316 million.

For tax-exempt assets, the mix by property type was 2% hotel/resort; 5% industrial; 69% office/commercial; 24% retail.

The total tax-exempt property portfolio is located 51% in the West; 6% Midwest; 34% East; 9% South.

Citicorp expects to be a net buyer in the East, West and Midwest regions.

The firm expects to be a net buyer of office, retail and industrial properties.

The main area of concentration in the next year will be acquisitions.

Citicorp offers open-end and closed-end funds and separate accounts.

The Citibank Real Estate Equity Fund is an open-end fund with $313 million in total assets, of which about $64 million was in cash. The fund makes equity investments in properties that can be re-leased or redeveloped to add value. Joint venture partnerships are used.

The parent company is Citicorp. Its subsidiary is Citicorp Real Estate Inc.

Michael J. Vitale is in charge of making property investments. Andrew Lowe is client contact.

## Coldwell Banker Capital Management Services

533 S. Fremont, Los Angeles, Calif. 90071; (213) 613-3597

| | |
|---|---|
| Tax-exempt real estate assets | $968 million |
| Equity | $925 million |
| Hybrid debt | $43 million |
| Commingled or pooled funds | |
| Equity | $490 million |
| Hybrid debt | $43 million |
| Direct, separate accounts | |
| Equity | $435 million |
| Total real estate assets | $968 million |

As of June 30, the tax-exempt equity assets of Coldwell Banker Capital Management Services had a market value of $725 million. Contributions committed but not received were $200 million.

The hybrid debt holdings had a market value of $43 million.

For tax-exempt assets, the mix by property type was 34.4% industrial; 38% office/commercial; 27.6% retail.

The total tax-exempt property portfolio is located 37% in the West; 20.7% Midwest; 25.6% East; 16.7% South.

Coldwell Banker expects to be a net buyer in all regions.

The firm expects to be a net buyer of retail, industrial and office properties.

Coldwell Banker expects to spend $500,000 on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The main area of concentration during the year will be on acquisitions.

Coldwell Banker offers separate and direct accounts and closed-end funds.

Investment clients include AT&T, San Francisco City and County, Unisys and Honeywell.

### Top 10 real estate managers ranked by tax-exempt assets in hybrid debt

| | $ millions |
|---|---|
| Aldrich, Eastman & Waltch | 1,800 |
| Boston Co. Real Estate | 1,730 |
| Balcor Institutional | 1,499 |
| Aetna | 1,130 |
| F.I.A. Associates | 1,012 |
| J.P. Morgan Investment | 967 |
| Alex. Brown Realty | 813 |
| Lomas Advisors | 755 |
| Latimer & Buck | 562 |
| TCW Realty Advisors | 453 |
| L.J. Melody | 453 |
| TOTAL | 11,174 |

The parent company is Coldwell Banker. Its subsidiaries are Homart, Coldwell Banker Residential Group and Coldwell Banker Commercial Group.

William "Cab" Grayson Jr., director of acquisitions, is in charge of making property investments. Bob Morris is client contact.

## Copley Real Estate Advisors

399 Boylston St., Boston, Mass. 02116; (617) 578-1200

| | |
|---|---|
| Tax-exempt real estate assets* | $8,698 million |
| Equity | $8,367 million |
| Commingled or pooled funds | |
| Equity | $5,217 million |
| Direct, separate accounts | |
| Equity | $3,481 million |
| Total real estate assets | $12,099 million |
| Equity | $12,099 million |

*as of March 31, 1988

As of March 31, the tax-exempt equity assets of Copley Real Estate Advisors had a market value of $8.367 billion. Contributions received but not invested were $157 million; contributions committed but not received were $174 million.

The general account tax-exempt assets of the parent, The New England, total $2.04 billion.

For tax-exempt assets, the mix by property type was 1% hotel/resort; 25% industrial; 40% office/commercial; 4% retail; 14% research and development; 7% residential; 9% land.

The total tax-exempt property portfolio is located 54% in the West; 4% Midwest; 23% East; 19% South.

Copley expects to be a net buyer in all regions.

The firm expects to be a net buyer of industrial, R&D and office properties.

The firm's main area of concentration during the year will be acquisitions.

Copley offers open-end and closed-end funds and separate accounts.

Copley offers the Developmental Properties Account, an open-end fund with $1.8 billion invested from 185 participants. The account has $100 million to invest and $123 million in commitments not received.

Copley Institutional Investors Fund, a closed-end fund with 12 participants, has $497 million invested, $57 million to invest and $49 million committed but not received.

Copley invests through partnerships primarily in industrial, R&D and office properties in planned parks. Geographic areas are limited; projects usually involve a local developer.

Kevin M. Mahony, managing director, is in charge of making property investments. John C. Phillips Jr., managing director, is client contact.

## Corporate Property Investors

305 E. 47th St., New York, N.Y. 10017; (212) 421-8200

| | |
|---|---|
| Tax-exempt real estate assets | $2,151 million |
| Equity | $2,151 million |
| Commingled or pooled funds | |
| Equity | $2,151 million |
| Total real estate assets | $3,679 million |
| Equity | $3,679 million |

As of June 30, the tax-exempt equity assets of Corporate Property Investors had a market value of $2.151 billion.

For tax-exempt assets, the mix by property type was 5% industrial; 12% office/commercial; 83% retail.

The total tax-exempt property portfolio is located 17% in the West; 7% Midwest; 41% East; 35% South.

Corporate Property Investors expects to spend $35 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The main area of concentration during the year will be rehabilitation and asset management of existing properties.

Corporate Property Investors offers REIT and joint venture products.

Investment clients include AT&T, Exxon, New York State and Rockefeller University.

G. Martin Fell, senior vice president, is in charge of making property investments. Warren Hamer, director of investor relations, is client contact.

## Eastdil Realty Inc.

40 W. 57th St., New York, N.Y. 10019; (212) 315-7200

| | |
|---|---|
| Tax-exempt real estate assets | $765 million |
| Equity | $705 million |
| Hybrid debt | $27 million |
| Mortgages | $33 million |
| Direct, separate accounts | |
| Equity | $705 million |
| Hybrid debt | $27 million |
| Mortgages | $33 million |
| Total real estate assets | $1,090 million |
| Equity | $705 million |
| Hybrid debt | $27 million |
| Mortgages | $358 million |

As of June 30, the tax-exempt equity assets of Eastdil Realty Inc. had a market value of $705 million.

The hybrid debt holdings had a market value of $27 million. The market value of the mortgages was $33 million.

For tax-exempt assets, the mix by property type was 6% industrial; 2% multifamily housing; 79% office/commercial; 13% retail.

The total tax-exempt property portfolio is located 28% in the West; 5% Midwest; 42% East; 25% South.

Eastdil expects to be a net buyer in the Midwest and East regions.

The firm expects to be a net buyer of industrial, retail and office properties.

Eastdil expects to spend $20 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The main area of concentration during the year will be rehabilitation and asset management of existing properties.

Eastdil offers direct separate accounts.

Investment clients include AT&T, Virginia Supplemental and Missouri.

Japanese clients include Nomura, Mitsui and Orient Leasing.

Eastdil's subsidiaries include Eastdil Advisers Inc.

Jonathan B. Weller, senior vice president, is in charge of making property investments. Robert T. Davis, executive vice president, is client contact.

Personnel moves — p. 27

## Richard Ellis Inc.

527 Madison Ave., New York, N.Y. 10022; (212) 355-4810

| | |
|---|---|
| Tax-exempt real estate assets | $2,381 million |
| Equity | $2,175 million |
| Hybrid debt | $206 million |
| Direct, separate accounts | |
| Equity | $2,175 million |
| Hybrid debt | $206 million |
| Total real estate assets | $5,067 million |
| Equity | $4,861 million |
| Hybrid debt | $206 million |

As of June 30, the tax-exempt equity assets of Richard Ellis Inc. had a market value of $925 million. Contributions committed but not received were $1.25 billion.

The hybrid debt holdings had a market value of $156 million. Contributions committed but not received were $50 million.

For tax-exempt assets, the mix by property type was 1% industrial; 74% office/commercial; 25% retail.

The total tax-exempt property portfolio is located 34% in the West; 15% in the Midwest; 44% East; 7% South.

Ellis expects to be a buyer in all regions and a seller in the Midwest and East.

The firm expects to be a net buyer of office and retail properties.

Ellis expects to spend $70 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The firm's main area of concentration during the year will be acquisitions.

Ellis offers direct, separate accounts.

Investment clients include New York State, Wisconsin, Barclays Bank and Hanson Trust.

Christopher D. Budden, president, is in charge of making property investments. David R. Hodes, senior vice president, is client contact.

## Equitable Real Estate Investment Management

787 7th Ave., Area 46K, New York, N.Y., 10019; (212) 554-4312

| | |
|---|---|
| Tax-exempt real estate assets | $8,318 million |
| Equity | $7,712 million |
| Hybrid debt | $169 million |
| Mortgages | $437 million |
| Commingled or pooled funds | |
| Equity | $5,065 million |
| Hybrid debt | $148 million |
| Mortgages | $111 million |
| Direct, separate accounts | |
| Equity | $2,647 million |
| Hybrid debt | $21 million |
| Mortgages | $326 million |
| Total real estate assets | $33,705 million |
| Equity | $22,683 million |
| Hybrid debt | $1,804 million |
| Mortgages | $9,218 million |

As of June 30, the tax-exempt equity assets of Equitable Real Estate Management Inc. had a market value of $7.157 billion. Contributions received but not invested were $175 million; contributions committed but not received were $380 million.

The hybrid debt holdings had a market value of $169 million; the market value of the mortgages was $437 million.

Of tax-exempt general account assets, $4.231 billion was invested in equity real estate; $945 million in hybrid debt; $4.507 billion in mortgages.

For tax-exempt assets, the mix by property type was 6.2% hotel/resort; 13.5% industrial; 53.1% office/commercial; 27.1% retail; 0.1% land.

The total tax-exempt property portfolio is located 29.6% in the West; 18.7% Midwest; 30.4% East; 21.3% South.

Equitable expects to be a buyer and seller in all regions.

The firm expects to be a net buyer of shopping centers, industrial and office properties and a net seller of hotels.

Equitable expects to spend $298.1 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

Equitable offers open-end and closed-end funds, single client accounts and direct investment.

The Prime Property Fund, an open-end fund, has invested $3.131 billion. Contributions received but not invested are $176.6 million; contributions committed but not received, $181 million. There are 256 participants in the fund that does primarily equity investments

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in high-quality, income-producing properties. Existing, fully leased properties are emphasized; construction loans are also made.

The New Properties Fund, a closed-end developmental fund with six participants, has invested $41.2 million; $200,000 is received but not invested.

Asset Enhancement Fund I, a closed-end fund with 10 participants, has invested $38.7 million. Contributions received but not invested are $400,000; contributions committed but not received are $99.8 million. The fund acquires existing, well-located commercial properties. Value is created through expansion, refocusing or renovation.

Investment clients include Exxon, Westinghouse, California Public Employees and California Teachers.

Japanese clients include Nippon Life, Dai-ichi Mutual Life, Asahi Life and Meiji Mutual Life.

The parent company is Equitable Life Assurance Society of the United States. A subsidiary is Equitable Agri-Business Inc.

Tommy Clinton, executive vice president, is in charge of making property investments. Paul J. Delnoy, executive vice president, is client contact.

### F.I.A. Associates

1601 Response Road, Suite 300, Sacramento, Calif. 95815; (916) 920-4051

| | |
|---|---|
| Tax-exempt real estate assets | $2.340 million |
| Equity | $1.167 million |
| Hybrid debt | $1.012 million |
| Mortgages | $161 million |
| Commingled or pooled funds | |
| Equity | $99 million |
| Hybrid debt | $14 million |
| Direct, separate accounts | |
| Equity | $1.068 million |
| Hybrid debt | $998 million |
| Mortgages | $161 million |
| Total real estate assets | $2.340 million |

As of June 30, the tax-exempt equity assets of F.I.A. Associates, a division of MeraBank, had a market value of $1.024 billion. Contributions committed but not received were $143 million.

The hybrid debt holdings had a market value of $691 million. Contributions committed but not received were $321 million. The market value of the mortgages was $161 million.

For tax-exempt assets, the mix by property type was 9% hotel/resort; 17% industrial; 5% multifamily housing; 49% office/commercial; 19% retail; 1% land.

The total tax-exempt property portfolio is located 45% in the West; 14% Midwest; 7% East; 34% South.

F.I.A. expects to be a net buyer in all regions.

The firm expects to be a net buyer of industrial, retail and multifamily housing properties.

F.I.A. expects to spend $6.8 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

Its main area of concentration during the year will be on the rehabilitation/asset management of existing properties.

F.I.A. offers separate accounts and closed-end funds.

F.I.A. Profile Fund I closed June 30, but is being held open for 90 days for four prospective participants. Contributions received and invested are $90 million from four participants. The group trust invests primarily in fully built and leased properties, forward commitments on pre-leased properties and convertible participating mortgages. Properties include offices, industrial, shopping centers, multifamily and hotels on a selective basis.

Investment clients include California Public Employees, Texas Teachers, Illinois Teachers and Utah.

The parent company is MeraBank.

Stephen A. Rosenthal, executive vice president, is in charge of making property investments. James L. Sublett, senior executive vice president, is client contact.

### First Chicago Investment Advisors

3 First National Plaza, Chicago, Ill. 60670; (312) 732-2171

| | |
|---|---|
| Tax-exempt real estate assets | $995 million |
| Equity | $983 million |
| Mortgages | $12 million |
| Commingled or pooled funds | |
| Equity | $917 million |
| Mortgages | $12 million |
| Direct, separate accounts | |
| Equity | $66 million |
| Total real estate assets | $1,039 million |
| Equity | $1,027 million |
| Mortgages | $12 million |

As of June 30, the tax-exempt equity assets of First Chicago Investment Advisors had a market value of $883 million. Contributions received but not invested were $52 million; contributions committed but not received were $48 million.

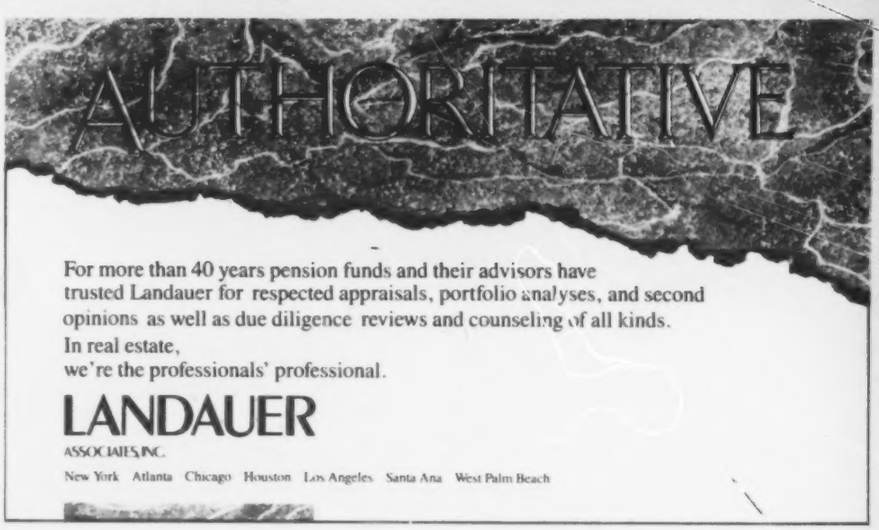
The market value of the mortgages was $12 million.

For tax-exempt assets, the mix by property type was 23% industrial; 21% multifamily housing; 32% office/commercial; 24% retail.

The total tax-exempt property portfolio is located 32% in the West; 17% Midwest; 31% East; 20% South.

First Chicago expects to be a buyer and seller in all regions.

The firm expects to be a buyer and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seller of adult congregate living facilities, apartments, retail, industrial and office properties.

First Chicago expects to spend $12 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The main area of concentration during the year will be acquisitions.

First Chicago offers open-end and closed-end funds and direct ownership accounts.

Real Estate Fund F is an open-end group trust with $664 million in invested assets for 121 participants. The fund represents a core portfolio, purchasing office, industrial, retail and residential properties that are usually existing and fully leased.

Living Environments for an Aging America Fund is a closed-end group trust with $105 million committed, of which $48 million is not yet invested. The trust does equity ownership and debt participation in congregate care facilities, some of which are developmental.

Investment clients include General Motors, Florida, Illinois Municipal and Shell.

The parent company is First Chicago Corp.

David A. Schwartz, vice president and acquisitions unit head, is in charge of making property investments. Janet Mabee Fawcett, assistant vice president, is client contact.

### First Interstate Mortgage Co. of Illinois

100 S. Wacker Drive, Chicago, Ill. 60606; (312) 845-8500

| | |
|---|---|
| Tax-exempt real estate assets | $585 million |
| Equity | $35 million |
| Hybrid debt | $50 million |
| Mortgages | $500 million |
| Direct, separate accounts | |
| Equity | $35 million |
| Hybrid debt | $50 million |
| Mortgages | $500 million |
| Total real estate assets | $585 million |

As of June 30, the tax-exempt equity assets of First Interstate Mortgage Co. of Illinois had a market value of $35 million.

The hybrid debt holdings had a market value of $50 million. The market value of the mortgages was $500 million.

For tax-exempt assets, the mix by property type was 20% industrial; 10% multifamily housing; 40% office/commercial; 30% retail.

The total tax-exempt property portfolio is located 10% in the West; 65% Midwest; 10% East; 15% South.

First Interstate Mortgage expects to be a buyer and seller in all regions.

The firm expects to be a buyer and seller of retail, office, industrial, multifamily and hotel properties.

The main area of concentration during the year will be acquisitions.

First Interstate Mortgage offers direct, separate accounts.

The parent company is First Interstate Bancorp.

J. Christopher Clifford, associate director-equity investment and financing, is in charge of making property investments and is client contact.

### First Wachovia Corp.

301 N. Main St., Winston-Salem, N.C. 27150; (919) 770-5900

| | |
|---|---|
| Tax-exempt real estate assets | $708 million |
| Equity | $602 million |
| Hybrid debt | $39 million |
| Mortgages | $67 million |
| Commingled or pooled funds | |
| Equity | $309 million |
| Hybrid debt | $39 million |
| Mortgages | $67 million |
| Direct, separate accounts | |
| Equity | $293 million |
| Total real estate assets | $708 million |

As of June 30, the tax-exempt equity assets of First Wachovia Corp. had a market value of $582 million. Contributions received but not invested were $20 million.

The hybrid debt holdings had a market value of $39 million. The market value of the mortgages was $67 million.

For tax-exempt assets, the mix by property type was 60% industrial; 3.7% office/commercial; 36.3% land.

The total tax-exempt property portfolio is located 44.3% in the West; 24.1% Midwest; 2.5% East; 29.1% South.

First Wachovia expects to be a net buyer in all regions.

The firm expects to be a net buyer of industrial properties.

First Wachovia expects to spend $15 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The main area of concentration during the year will be rehabilitation and asset management of existing properties.

First Wachovia offers an open-end fund and separate accounts.

The DTF Real Estate Fund has invested $5 million from 242 institutions. The fund's investment strategy involves acquisition of geographically diversified, quality, multiuse business parks.

Investment clients include RJR Nabisco, Piedmont Aviation and AT&T.

Robert Smedley, senior vice president, is in charge of making property investments. Thomas McAllister, vice president, is client contact.

### John Hancock Properties

2 Copley Place, Suite 200, Boston, Mass. 02117; (617) 572-3811

| | |
|---|---|
| Tax-exempt real estate assets | $570 million |
| Equity | $570 million |
| Commingled or pooled funds | |
| Equity | $570 million |
| Total real estate assets | $2,139 million |
| Equity | $2,139 million |

As of June 30, the tax-exempt equity assets of John Hancock Properties Inc. had a market value of $570 million.

Of tax-exempt general account assets, $33 million was invested in equity real estate.

For tax-exempt assets, the mix by property type was 3% hotel/resort; 15% industrial; 32% multifamily housing; 30% office/commercial; 6% retail; 14% office/showroom/research and development.

The total tax-exempt property portfolio is located 24% in the West; 28% Midwest; 31% East; 17% South.

Hancock Properties expects to be a buyer in the West, East and Midwest regions and a seller in the Midwest and South regions.

The firm expects to be a net buyer of industrial, R&D, retail and apartment properties and a net seller of hotels.

Hancock Properties expects to spend $7.1 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The firm's main area of concentration during the year will be disposition.

Hancock Properties offers open-end and closed-end funds and direct, separate accounts.

The firm offers the Equity Real Estate open-end separate account fund with $458.5 million in contributions received and invested.

The parent company is John Hancock Financial Services.

John Hancock Realty Services is a subsidiary.

James H. Patterson II is in charge of making property investments. John Kemble, vice president-investor relations, is client contact.

### Heitman Advisory Corp.

180 N. LaSalle St., Chicago, Ill. 60601; (312) 855-5700

| | |
|---|---|
| Tax-exempt real estate assets | $4,881 million |
| Equity | $4,881 million |
| Commingled or pooled funds | |
| Equity | $884 million |
| Direct, separate accounts | |
| Equity | $3,997 million |
| Total real estate assets | $5,153 million |
| Equity | $5,153 million |

As of June 30, the tax-exempt equity assets of Heitman Advisory Corp. had a market value of $4.093 billion. Contributions received but not invested were $88 million; contributions committed but not received were $700 million.

For tax-exempt assets, the mix by property type was 11% industrial; 45% office/commercial; 26% retail; 18% mixed use.

The total tax-exempt property portfolio is located 23% in the West; 45% Midwest; 24% East; 8% South.

The firm expects to be a net buyer of retail, office/commercial, industrial and mixed-use properties.

**Top 10 real estate managers ranked by tax-exempt assets in real estate equity**

| | $ millions |
|---|---|
| Copley Real Estate* | 8,696 |
| Equitable Real Estate | 7,712 |
| JMB Institutional | 6,800 |
| Heitman Advisory | 4,881 |
| Prudential Realty | 4,740 |
| Aetna | 3,505 |
| RREEF | 3,072 |
| LaSalle Advisors | 2,218 |
| Richard Ellis | 2,175 |
| Corporate Property Investors | 2,151 |
| TOTAL | 45,950 |

* Data as of March 31, 1988

Heitman offers closed-end funds and separate accounts.

Heitman Real Estate Fund III has invested $170 million; $88 million is received and not invested and $26.4 million is committed but not received. The fund operates a geographically diversified portfolio of shopping centers, office buildings and industrial parks.

Real Estate Fund IV is open for subscription. Twelve clients have committed $100 million. The fund will invest in the same manner as Fund III.

Investment clients include AT&T, Southwestern Bell, Alaska Permanent Fund and British Telecommunications.

The parent company is Heitman Financial Ltd. Its subsidiaries are Heitman Financial Services Ltd. and Heitman Properties Ltd.

Norman Perlmutter, chairman of Heitman Financial Ltd., is in charge of making property investments. David Glickman, president of Heitman Advisory, is client contact.

### JMB Institutional Realty

875 N. Michigan Ave., Suite 3960, Chicago, Ill. 60611; (312) 915-1900

| | |
|---|---|
| Tax-exempt real estate assets | $6,800 million |
| Equity | $6,800 million |
| Commingled or pooled funds | |
| Equity | $6,510 million |
| Direct, separate accounts | |
| Equity | $290 million |
| Total real estate assets | $21,500 million |
| Equity | $21,500 million |

As of June 30, the tax-exempt equity assets of JMB Institutional Realty Corp. had a market value of $6.373 billion. Contributions received but not invested were $340 million; contributions committed but not received were $87 million.

For tax-exempt assets, the mix by property type was 5% multifamily housing; 48% office/commercial; 47% retail.

The total tax-exempt property portfolio is located 23% in the West; 26% Midwest; 32% East; 19% South.

JMB expects to be a net buyer in all regions. The firm expects to be a net buyer of office, retail, residential and industrial properties.

JMB expects to spend $100 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The firm's main area of concentration during the year will be acquisitions.

JMB offers closed-end commingled funds and separate accounts.

JMB's Group Trust V and Endowment and Foundation Realty Ltd.-JMB IV are still open for subscription. Both funds will primarily make equity investments in newer office, retail and industrial properties that are fully constructed and leased.

JMB Group Trust IV has $443 million invested, $103 million in contributions received but not invested and $71 million committed but not yet received; Endowment and Foundation Realty Ltd.-JMB III has $107 million in investments and $54 million to invest; JMB Institutional Apartment Partnership I has $90 million in investments, $112 million to invest and $50 million committed but not yet received. The fund makes equity investments in suburban garden apartments and high-rise urban buildings with 250 to 1,000 units.

Investment clients include Pennsylvania State Employes, Ameritech, Kamehameha Schools/Bishop Estate and Connecticut.

The firm's affiliate is JMB Realty Corp.

Jerome J. Claeys III, chairman, is in charge of making property investments. John S. Lillard, president, is client contact.

### Jones Lang Wootton Realty Advisors

101 E. 52nd St., New York, N.Y. 10022; (212) 836-9501

| | |
|---|---|
| Tax-exempt real estate assets | $1,200 million |
| Equity | $800 million |
| Hybrid debt | $400 million |
| Direct, separate accounts | |
| Equity | $800 million |
| Hybrid debt | $400 million |
| Total real estate assets | $1,200 million |

As of June 30, the tax-exempt equity assets of Jones Lang Wootton Realty Advisors had a market value of $600 million. Contributions committed but not received were $200 million.

The hybrid debt holdings had a market value of $200 million. Contributions committed but not received were $200 million.

For tax-exempt assets, the mix by property type was 20% resort/hotel; 6% industrial; 4% multifamily housing; 25% office/commercial; 25% retail; 20% mixed use.

The total tax-exempt property portfolio is located 20% in the West; 15% Midwest; 45% East; 20% South.

Jones Lang Wootton expects to be a net buyer in all regions. The firm expects to be a net buyer of industrial, retail, multifamily and office property types.

The firm expects to spend $100 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The firm's main area of concentration during the year will be rehabilitation and asset management of existing properties.

Jones Lang Wootton offers separate accounts.

Investment clients include Pacific Telesis, U S WEST, U.S. Steel and Illinois Teachers.

Steve Furnary, Charlie Grossman, Frank Sullivan and John Weisz, managing directors, are in charge of making property investments. Mr. Weisz is client contact.

### Karsten Realty Advisors

12121 Wilshire Blvd., Los Angeles, Calif. 90025; (213) 826-0035

| | |
|---|---|
| Tax-exempt real estate assets | $565 million |
| Equity | $468 million |
| Hybrid debt | $6 million |
| Mortgages | $91 million |
| Commingled or pooled funds | |
| Equity | $52 million |
| Hybrid debt | $6 million |
| Direct, separate accounts | |
| Equity | $416 million |
| Mortgages | $91 million |
| Total real estate assets | $767 million |
| Equity | $670 million |
| Hybrid debt | $6 million |
| Mortgages | $91 million |

As of June 30, the tax-exempt equity assets of Karsten Realty Advisors had a market value of $468 million.

The hybrid debt holdings had a market value of $6 million. The market value of the mortgages was $91 million.

For tax-exempt assets, the mix by property type was 14% hotel/resort; 10% industrial; 2% multifamily housing; 53% office/commercial; 17% retail; 4% other.

The total tax-exempt property portfolio is located 72% in the West; 2% Midwest; 26% South.

Karsten Realty Advisors expects to be a net buyer in the West and a net seller in the South and Midwest.

The firm expects to be a net buyer of retail, industrial and office properties.

Karsten Realty Advisors expects to spend $4.7 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The main area of concentration during the year will be rehabilitation and asset management of existing properties.

Karsten Realty Advisors offers closed-end funds, separate accounts and workouts.

Karsten Realty Advisors' Real Estate Equity Fund is open; the fund's $14.2 million in gross assets from nine participants are invested. The group trust acquires office, industrial and retail properties in geographically diverse areas with growth potential and stable economies.

Investment clients include AT&T, Nevada, LTV and Ohio Teachers.

The parent company is First Interstate Bancorp.

Hugh G. Hilton, principal and director of acquisitions, is in charge of making property investments. A. Redmond Doms Jr., managing principal, is client contact.

### Kennedy Associates Real Estate Counsel Inc.

2400 Financial Center, Seattle, Wash. 98161; (206) 623-4739

| | |
|---|---|
| Tax-exempt real estate assets | $796 million |
| Equity | $486 million |
| Hybrid debt | $291 million |
| Mortgages | $19 million |
| Commingled or pooled funds | |
| Equity | $324 million |
| Hybrid debt | $159 million |
| Direct, separate accounts | |
| Equity | $162 million |
| Hybrid debt | $132 million |
| Mortgages | $19 million |
| Total real estate assets | $796 million |

As of June 30, the tax-exempt equity assets of Kennedy Associates Real Estate Counsel Inc. had a market value of $486 million.

The hybrid debt holdings had a market value of $291 million. The market value of the mortgages was $19 million.

For tax-exempt assets, the mix by property type was 1% hotel/resort; 10% industrial; 55% office/commercial; 3% retail; 30% business parks; 1% mixed use.

The total tax-exempt property portfolio is located 38% in the West; 41% Midwest; 15% East; 6% South.

The firm's main area of concentration during the year will be acquisitions.

Kennedy Real Estate Counsel offers open-end funds and separate accounts.

The firm's Multi-Employer Property Trust is an open-end fund with invested contributions of $374 million from 104 participants. The fund invests in 100% union-built construction projects.

Investment clients include the Alaska Permanent Fund and Boeing.

R.L. Wieneke, senior vice president-acquisitions, and R. Hass, Bennett Williams and Jon Hass, all vice presidents-acquisitions, are in charge of making property investments. Jim C. Snyder, president, is client contact.

### LaSalle Advisors Ltd.

11 S. LaSalle St., Chicago, Ill. 60603; (312) 782-5800

| | |
|---|---|
| Tax-exempt real estate assets | $2,216 million |
| Equity | $2,216 million |
| Commingled or pooled funds | |
| Equity | $1,900 million |
| Direct, separate accounts | |
| Equity | $316 million |
| Total real estate assets | $2,216 million |

As of June 30, the tax-exempt equity assets of LaSalle Advisors Ltd. had a market value of $1.7 billion. Contributions committed but not received were $516 million.

For tax-exempt assets, the mix by property type was 6% industrial; 72% office/commercial; 22% retail.

The total tax-exempt property portfolio is located 16.4% in the West; 32% Midwest; 29.7% East; 21.9% South.

LaSalle Advisors expects to be a net buyer of office, retail and industrial properties.

The firm's main area of concentration during the year will be acquisitions.

LaSalle Advisors offers closed-end commingled funds and separate account management.

LaSalle Advisors offers LaSalle Fund IV, a closed-end commingled fund that will close by year-end 1988 or early 1989. The group trust will be from $300 million to $500 million; it has received commitments of $100 million. The fund will acquire large, high-quality offices, shopping centers and industrial parks to which value can be added through property management.

LaSalle Fund II has $47 million of its $290 million to be invested; LaSalle Fund III has $210 million of its $413 million to be invested.

Investment clients include Illinois Municipal, Pacific Telesis, Bell Atlantic and Public Service Electric & Gas.

Kenneth M. Campia, managing director, is in charge of making property investments. Christopher J. Burke, vice president, is client contact.

### Latimer & Buck Inc.

121 S. Broad St., Philadelphia, Pa. 19107; (215) 985-3900

| | |
|---|---|
| Tax-exempt real estate assets | $1.213 million |
| Hybrid debt | $562 million |
| Mortgages | $651 million |
| Total real estate assets | $1.213 million |

As of June 30, the tax-exempt hybrid debt holdings of Latimer & Buck Inc. had a market value of $542 million. Contributions committed but not received were $20 million. The market value of the mortgages was $627 million. Contributions committed but not received were $24 million.

For tax-exempt assets, the mix by property type was 3% hotel/resort; 8% industrial; 17% multifamily housing; 42% office/commercial; 5% retail; 25% residential/single family.

The total tax-exempt property portfolio was located 3% in the West; 10% Midwest; 72% East; 15% South.

The firm's main area of concentration during the year will be acquisitions.

Latimer & Buck offers direct accounts.

Investment clients include Pennsylvania Public School Employees and Pennsylvania State Employees.

The parent company is Fidelity Bank.

Richard Humphreys is in charge of making property investments. Douglas Callantine is client contact.

### Lehndorff & Babson Real Estate Counsel

2501 Cedar Springs, Dallas, Texas 75201; (214) 855-5800

| | |
|---|---|
| Tax-exempt real estate assets | $1.253 million |
| Equity | $1.253 million |
| Commingled or pooled funds | |
| Equity | $190 million |
| Direct, separate accounts | |
| Equity | $1.063 million |
| Total real estate assets | $2.400 million |
| Equity | $2.400 million |

As of June 30, the tax-exempt equity assets of Lehndorff & Babson Real Estate Counsel had a market value of $1.05 billion. Contributions received but not invested were $10 million; contributions committed but not received were $193 million.

For tax-exempt assets, the mix by property type was 4% industrial; 56% office/commercial; 40% retail.

The total tax-exempt property portfolio is located 28% in the West; 10% Midwest; 32% East; 30% South.

Lehndorff & Babson expects to be a net buyer in the West and East regions.

The firm expects to be a net buyer of retail, office and industrial type properties.

The main area of concentration during the year will be acquisitions.

Lehndorff & Babson offers closed-end funds and direct separate accounts.

Lehndorff & Babson Property Fund III is open for subscription. The fund invests in scarce office or shopping center properties that are built and leased and offer the opportunity for enhancement.

Lehndorff & Babson Endowment, Foundation and Institutional Fund Ltd. is open for subscription. The fund invests in income-producing properties that are economically and geographically diversified.

Investment clients include Ameritech, California State Teachers, Kellogg and United Technologies.

M. Thomas Lardner, general manager and chief investment officer, is in charge of making property investments. James S. White, executive vice president, is client contact.

PROPERTY's up and comer profiled: p. P12.

### Lomas Advisors

2001 Bryan Tower, Suite 3300, Dallas, Texas 75201; (214) 746-8296

| | |
|---|---|
| Tax-exempt real estate assets | $925 million |
| Hybrid debt | $755 million |
| Mortgages | $170 million |
| Commingled or pooled funds | |
| Hybrid debt | $40 million |
| Mortgages | $6 million |
| Direct, separate accounts | |
| Hybrid debt | $715 million |
| Mortgages | $164 million |
| Total real estate assets | $925 million |

As of June 30, the tax-exempt hybrid debt holdings of Lomas Advisors had a market value of $336 million. Contributions committed but not received were $419 million. The market value of the mortgages was $170 million.

For tax-exempt assets, the mix by property type was 13% industrial; 14% multifamily housing; 66% office/commercial; 7% retail.

The total tax-exempt property portfolio is located 12% in the West; 14% Midwest; 13% East; 61% South.

Lomas Advisors expects to be a net buyer in the East and West regions.

The firm expects to be a net buyer of apartments.

The firm's main area of concentration during the year will be acquisitions.

Lomas Advisors offers closed-end funds and separate account management.

Lomas & Nettleton Institutional Mortgage Fund II, a closed-end, 10 year limited partnership, has $23.2 million in assets and contributions committed but not received of $5.2 million. The fund invests in the development of office, retail and industrial projects through participating mortgages.

Investment clients include the Texas Teachers and the PRIM Board.

The parent company is Lomas Financial Corp. Its subsidiaries are Lomas Management, Lomas Mortgage Corp. and L&N Housing Corp.

Les Meicher, senior vice president, is in charge of making property investments. Berry Hamilton, vice president, is client contact.

Personnel moves — p. P27.

### McMahan Real Estate Estate Advisors Inc.

201 California St., Suite 400, San Francisco, Calif. 94111; (415) 433-7770

| | |
|---|---|
| Tax-exempt real estate assets | $438 million |
| Equity | $329 million |
| Hybrid debt | $109 million |
| Commingled or pooled funds | |
| Equity | $25 million |
| Hybrid debt | $5 million |
| Direct, separate accounts | |
| Equity | $304 million |
| Hybrid debt | $104 million |
| Total real estate assets | $556 million |
| Equity | $417 million |
| Hybrid debt | $139 million |

As of June 30, the tax-exempt equity assets of McMahan Real Estate Advisors Inc. had a market value of $205.1 million. Contributions committed but not received were $124 million.

The hybrid debt holdings had a market value of $26.3 million. Contributions committed but not received were $83.3 million.

For tax-exempt assets, the mix by property type was 10.5% industrial; 46.2% office/commercial; 43.3% retail.

The total tax-exempt property portfolio is located 91.4% in the West and 8.6% in the South.

McMahan expects to be a net buyer in the West.

The firm expects to be a net buyer of industrial, retail and office properties.

McMahan expects to spend less than $1 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The firm's main area of concentration during the year will be on acquisition.

The company offers separate accounts.

Investment clients include NYNEX, Southwestern Bell, Contra Costa County and Ventura County.

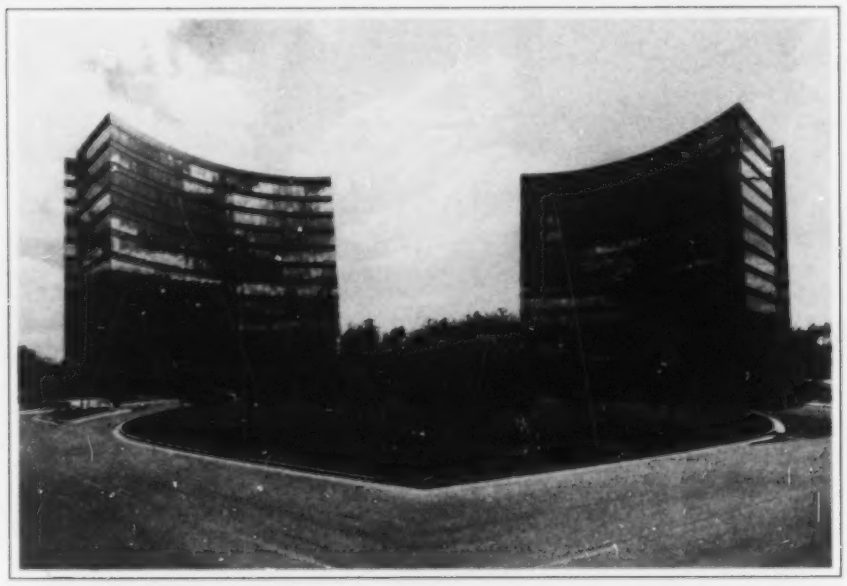
The parent company is McMahan Financial Services Inc. Other subsidiaries are McMahan Property Management Inc. and McMahan Real Estate Services Inc.

Thomas C. Clark, executive vice


*LaSalle Advisors Limited*

*Real Estate Investment Advisor to Qualified Tax-exempt Institutions*

*Over $2,500,000,000 Under Management*



*LaSalle Advisors Limited purchased this premier office building complex on behalf of one of its closed-end group trusts.*

***LA SALLE ADVISORS***

*Limited*

*Real Estate Advisory Services*

*Chicago, Illinois 60603*

*A Subsidiary of LaSalle Partners Limited*

president, is in charge of making property investments. Frank C. Harding Jr. and Jean C. Hurley, vice presidents, are client contacts.

### McMorgan & Co.

201 Spear St., Suite 1700, San Francisco, Calif. 94105; (415) 777-9300

| | |
|---|---|
| Tax-exempt real estate assets | $1,300 million |
| Equity | $400 million |
| Hybrid debt | $100 million |
| Mortgages | $800 million |
| Direct, separate accounts | |
| Equity | $400 million |
| Hybrid debt | $100 million |
| Mortgages | $800 million |
| Total real estate assets | $1,300 million |

As of June 30, the tax-exempt equity assets of McMorgan & Co. had a market value of $400 million.

The hybrid debt holdings had a market value of $100 million and mortgages, $800 million.

For tax-exempt assets, the mix by property type was 1% hotel/resort; 30% industrial; 9% multifamily housing; 30% office/commercial; 30% retail.

The total tax-exempt property portfolio is located in the West.

McMorgan expects to be a net buyer in all regions. The firm expects to be a net buyer of retail, industrial and office properties.

McMorgan expects to spend $10 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The firm's main area of concentration during the year will be acquisitions.

The firm offers direct, separate accounts.

Michael T. Fry, executive vice president, is in charge of making property investments and is the client contact.

### Mellon Real Estate Investment Management

551 Madison Ave., New York, N.Y. 10022; (212) 702-4040

| | |
|---|---|
| Tax-exempt real estate assets | $1,220 million |
| Equity | $586 million |
| Hybrid debt | $385 million |
| Mortgages | $249 million |
| Direct, separate accounts | |
| Equity | $586 million |
| Hybrid debt | $385 million |
| Mortgages | $249 million |
| Total real estate assets | $1,220 million |

As of June 30, the tax-exempt equity assets of Mellon Real Estate Investment Management Corp. had a market value of $500 million. Contributions committed but not received were $86 million.

The hybrid debt holdings had a market value of $370 million. Contributions committed but not received were $15 million. The market value of the mortgages was $230 million. Contributions committed but not received were $19 million.

For tax-exempt assets, the mix by property type was 5% hotel/resort; 13% industrial; 5% multifamily housing; 60% office/commercial; 15% retail; 2% land.

The total tax-exempt property portfolio is located 23% in the West; 37% Midwest; 23% East; 17% South.

Mellon expects to be a net buyer in the East region.

The firm expects to be a net buyer of industrial, retail and office properties.

Mellon expects to spend $5 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The firm's main area of concentration during the year will be acquisitions.

Mellon Real Estate offers separate accounts.

Investment clients include Colorado Fire and Police, Westinghouse, Borg-Warner and Joint Municipal Employees.

The parent company is Mellon Bank Corp.

Arlen Dahlquist, senior vice president; Jeffrey Shea and Thomas Ryan, vice presidents; and David Pierce, investment manager, are in charge of making property investments. Karin E. Shewer, senior vice president, is client contact.

PIPER real estate report: *P&I Age* Dec. 12.

### L.J. Melody & Co.

5847 San Felipe, Suite 4400, Houston, Texas 77057; (713) 787-1900

| | |
|---|---|
| Tax-exempt real estate assets | $838 million |
| Hybrid debt | $453 million |
| Mortgages | $385 million |
| Direct, separate accounts | |
| Hybrid debt | $453 million |
| Mortgages | $385 million |
| Total real estate assets | $1,992 million |
| Hybrid debt | $665 million |
| Mortgages | $1,327 million |

As of June 30, the tax-exempt hybrid debt assets of L.J. Melody & Company had a market value of $299 million. Contributions received but not invested were $154 million. The market value of the mortgages was $385 million.

For tax-exempt assets, the mix by property type was 5% multifamily housing; 63.8% office/commercial; 31.2% retail.

The total tax-exempt property portfolio is located 17.4% in the West; 3.6% East; 79% South.

L.J. Melody expects to be a net buyer in all regions.

The firm expects to be a net buyer of retail, multifamily, industrial and office properties.

The firm's main area of concentration during the year will be acquisitions.

L.J. Melody offers direct accounts and closed-end funds.

L.J. Melody offers Melody Fund I, a $125 million closed-end apartment fund presently open for subscriptions; it has $40 million in commitments. The fund, for public pension plans, invests in completed apartment properties nationwide. Investments in local markets will be through limited partnerships with national and regional development firms.

L.J. Melody & Co. of California is an affiliate.

Investment decisions are made by regional executives. Robert D. Barkley, vice president, is client contact.

### Metropolitan Life Insurance

1 Madison Ave., New York, N.Y. 10010; (212) 578-6906

| | |
|---|---|
| Tax-exempt real estate assets | $7774 million |
| Equity | $7714 million |
| Mortgages | $60 million |
| Commingled or pooled funds | |
| Equity | $588 million |
| Mortgages | $60 million |
| Direct, separate accounts | |
| Equity | $126 million |
| Total real estate assets | $23,920 million |
| Equity | $9,364 million |
| Mortgages | $14,556 million |

As of June 30, the tax-exempt equity assets of Metropolitan Life Insurance Co. had a market value of $579 million. Contributions received but not invested were $65 million; contributions committed but not received were $70 million.

The market value of the mortgages was $60 million.

For tax-exempt assets, the mix by property type was 3% hotel/resort; 26% industrial; 54% office/commercial; 16% retail; 1% land.

The total tax-exempt property portfolio is located 35% in the West; 17% Midwest; 22% East; 26% South.

The firm expects to be a buyer of industrial, office, retail and multifamily properties and a seller of office and industrial properties.

Metropolitan Life plans to spend $40 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The main area of concentration during the year will be on rehabilitation and asset management of existing properties.

Metropolitan Life offers open-end and closed-end funds and direct, separate accounts.

Metropolitan Life's Closed-End Series III, with a target of $200 million, had $35 million committed but not received from two clients as of March 31. The equity fund will acquire a mix of office, retail, R&D, light industrial, warehouse and apartment properties in a geographic balance.

The Tower Fund, an open-end fund, had $217 million from 49 participants as of March 31. The fund invests in wholly owned office, R&D/industrial and retail properties acquired with

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High earnings and union jobs—two positive returns from one investment.

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Washington, DC 20001

*For information on how your to-be-built project can apply for J FOR JOBS take-out financing, call our Mortgage Department at 202/682-6678.

cash, although leverage may be used. The properties are concentrated in the South and East.

Account RE Fund, an open-end fund, had $236 million in assets from 32 participants as of March 31. The fund participates in equity and joint venture investments in Metropolitan's general account. The emphasis is on existing and leased R&D/industrial, regional shopping centers and office buildings.

Investment clients include Hawaii, United Mine Workers, IT&T and the Girl Scouts of America.

Dai-ichi Seimei America Corp. is a Japanese client.

Bill Ripberger, vice president, is in charge of making property investments. Bruce Kosakowski, assistant vice president, is client contact.

## MIG Realty Advisors Inc.

1645 Palm Beach Lakes Blvd., West Palm Beach, Fla. 33401; (407) 686-1800

| | |
|---|---|
| Tax-exempt real estate assets | $705 million |
| Equity | $369 million |
| Hybrid debt | $224 million |
| Mortgages | $112 million |
| Commingled or pooled funds | |
| Equity | $369 million |
| Direct, separate accounts | |
| Hybrid debt | $224 million |
| Mortgages | $112 million |
| Total real estate assets | $705 million |

As of June 30, the tax-exempt equity assets of MIG Realty Advisors Inc. had a market value of $299 million. Contributions received but not invested were $22 million; contributions committed but not received were $48 million.

The hybrid debt holdings had a market value of $157 million. Contributions committed but not received were $67 million. The market value of the mortgages was $61 million. Contributions committed but not received were $51 million.

For tax-exempt assets, the mix by property type was 1% hotel/resort; 30% industrial; 23% multifamily housing; 31% office/commercial; 14% retail; 1% personal care.

The total tax-exempt property portfolio is located 36% in the West; 17% Midwest; 14% East; 33% South.

MIG expects to be a buyer in the East, South and West regions and a seller in the East and South regions.

The firm expects to be a buyer of retail, industrial, multifamily and office/commercial properties and a seller of retail and industrial.

The firm's main area of concentration during the year will be rehabilitation/asset management of existing properties.

MIG offers direct investment accounts and closed-end funds.

MIG offers four closed-end funds. Mortgage Investors Fund I has $4.3 million remaining to invest of the $22.5 million committed. Mortgage Investors Fund II still has $13 million to invest of $65 million committed. Mortgage Investors Self Storage Fund I has $3.1 million left to invest of $15.5 million committed.

The Mortgage Investors Group Trust III is open to subscriptions; the fund has $60 million committed of which $12.5 million is invested.

Investment clients include the Detroit General Retirement; Detroit Policemen and Firemen; Oakland County Employees and Southgate Policemen and Firemen.

Larry E. Wright, executive vice president, is in charge of making property investments. Edwin B. Wayman, president, is client contact.

## J.P. Morgan Investment Management Inc.

522 Fifth Ave., New York, N.Y. 10036; (212) 837-1242

| | |
|---|---|
| Tax-exempt real estate assets | $1,344 million |
| Equity | $377 million |
| Hybrid debt | $967 million |
| Commingled or pooled funds | |
| Equity | $285 million |
| Hybrid debt | $834 million |
| Direct, separate accounts | |
| Equity | $92 million |
| Hybrid debt | $133 million |
| Total real estate assets | $1,475 million |
| Equity | $404 million |
| Hybrid debt | $1,071 million |

As of June 30, the tax-exempt equity assets of J.P. Morgan Investment Management Inc. had a market value of $95 million. Contributions received but not invested were $201 million; contributions committed but not received were $81 million.

The hybrid debt holdings had a market value of $849 million. Contributions received but not invested were $111 million; contributions committed but not received were $7 million.

For tax-exempt assets, the mix by property type was 2% hotel/resort; 15% industrial; 45% office/commercial; 38% retail.

The total tax-exempt property portfolio is located 2% in the West; 17% Midwest; 60% East; 21% South.

J.P. Morgan expects to be a net buyer in all regions.

The firm expects to be a net buyer of office, industrial and retail properties.

J.P. Morgan expects to spend about $80 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The firm's main area of concentration during the year will be acquisitions.

J.P. Morgan offers an open-end real estate fund and direct separate account management.

J.P. Morgan's open-end Real Estate Fund has 136 participants. The fund seeks direct investments in income-producing real properties and seeks special-situation projects providing high levels of current income, significant cash flow growth potential and high residual property appreciation.

The parent company is J.P. Morgan & Co.

Timothy J. Heise, managing director, is in charge of making property investments. Erling Asheim, vice president, is client contact.

## NCNB National Bank

1 NCNB Plaza, Charlotte, N.C. 28255; (704) 374-8405

| | |
|---|---|
| Tax-exempt real estate assets | $629 million |
| Equity | $537 million |
| Hybrid debt | $92 million |
| Commingled or pooled funds | |
| Equity | $388 million |
| Hybrid debt | $79 million |
| Direct, separate accounts | |
| Equity | $149 million |
| Hybrid debt | $13 million |
| Total real estate assets | $629 million |

As of June 30, the tax-exempt equity assets of NCNB National Bank had a market value of $513 million. Contributions received but not invested were $24 million.

The hybrid debt holdings had a market value of $92 million.

For tax-exempt assets, the mix by property type was 42% industrial; 5% multifamily housing; 12% office/commercial; 41% land.

The total tax-exempt property portfolio is located 1% in the West; 1% Midwest; 15% East; 83% South.

NCNB expects to be a net buyer in the South.

The firm expects to be a net buyer of office and industrial properties.

NCNB expects to spend $50 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The firm's main area of concentration during the year will be on developmental properties.

NCNB offers open-end and closed-end funds and separate account management.

The NCNB Real Estate Fund is an open-end fund of $411 million; $24 million is contributions received but not invested. There are 673 participants. The fund buys land for the development of commercial and residential investments, primarily business parks in the Southeast.

Investment clients include TWA Pilots, Ohio Schools, Washington Suburban Sanitary Commission and Inter-American Development Bank.

The parent company is NCNB Corp.

Floyd T. Boyce, senior vice president, is in charge of making property investments. Mark S. Coltrin, vice president, is client contact.

## The O'Connor Group

200 Park Ave., 51st Floor, New York, N.Y. 10166; (212) 687-7420

| | |
|---|---|
| Tax-exempt real estate assets | $902 million |
| Equity | $797 million |
| Hybrid debt | $105 million |
| Commingled or pooled funds | |
| Equity | $320 million |
| Direct, separate accounts | |
| Equity | $477 million |
| Hybrid debt | $105 million |
| Total real estate assets | $1,170 million |
| Equity | $1,065 million |
| Hybrid debt | $105 million |

**Top 10 real estate managers ranked by tax-exempt assets in mortgages**

| | $ millions |
|---|---|
| McMorgan | 800 |
| Lehmer & Buck | 661 |
| First Interstate Mortgage | 500 |
| Equitable Real Estate | 437 |
| Union Labor Life | 413 |
| L.J. Melody | 385 |
| Wells Fargo Realty | 335 |
| ASB Capital | 324 |
| Citicorp | 316 |
| August-Am Cal | 279 |
| TOTAL | 4,440 |

As of June 30, the tax-exempt equity assets of The O'Connor Group had a market value of $589 million. Contributions committed but not received were $208 million.

The hybrid debt holdings had a market value of $105 million.

For tax-exempt assets, the mix by property type was 7% industrial; 8% office/commercial; 85% retail.

The total tax-exempt property portfolio is located 57% Midwest; 19% East; 24% South.

The firm expects to be a net buyer of retail, industrial, and office properties.

O'Connor Group expects to spend $25 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The firm's main area of concentration during the year will be acquisitions.

O'Connor offers closed-end funds and separate accounts.

The O'Connor Group offers the Retail Property Trust, a closed-end fund. A secondary offering of $150 million to $350 million will close Sept. 30. Original contributions of $260 millions are fully invested. The strategy is to acquire top-quality regional centers.

Investment clients include AT&T, Kansas Public Employees, Burlington Northern and New York State Common.

The firm's subsidiaries are O'Connor Management Inc. and O'Connor Realty Advisors.

Glenn J. Rufrano and Benjamin G. Gifford, partners, are in charge of making property investments. Nancy I. Lashine, vice president, is client contact.

## Property Capital Associates

200 Clarendon St., Boston, Mass. 02116; (617) 536-8600

| | |
|---|---|
| Tax-exempt real estate assets | $770 million |
| Equity | $770 million |
| Commingled or pooled funds | |
| Equity | $685 million |
| Direct, separate accounts | |
| Equity | $85 million |
| Total real estate assets | $770 million |

As of June 30, the tax-exempt equity assets of Property Capital Associates had a market value of $625 million. Contributions committed but not received were $145 million.

For tax-exempt assets, the mix by property type was 27% hotel/resort; 7% industrial; 14% multifamily housing; 35% office/commercial; 17% retail.

The total tax-exempt property portfolio is located 30% in the West; 40% Midwest; 20% East; 10% South.

PCA expects to be a net buyer in all regions.

The firm expects to be a net buyer of industrial, office, apartments and retail properties and a net seller of hotels.

PCA expects to spend $100 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The firm's main area of concentration during the year will be rehabilitation/asset management of existing properties.

The firm offers closed-end funds and separate accounts.

The $111 million PCA Tishman Speyer Inc. fund closed April 1987; contributions committed but not invested are $21 million. The fund is a real estate investment trust affiliated with Tishman Speyer Properties that will acquire through leverage and improve existing major office buildings.

The PCA Sammis Industrial Fund, which closed Dec. 15, had no contributions as of June 30. Investors will own shares in a REIT that will enter into a partnership with an affiliate of The Sammis Co. to acquire through leverage and improve existing industrial properties and business parks in selected metropolitan markets.

Investment clients include Allied-Signal, Eastman Kodak, Harvard University and World Bank.

Anthony D. Fox, director, is in charge of making property investments. Thomas J. Mizo, vice president, is client contact.

## Prudential Realty Group

3 Prudential Plaza, Newark, N.J. 07101; (201) 877-8462

| | |
|---|---|
| Tax-exempt real estate assets | $5,171 million |
| Equity | $4,740 million |
| Hybrid debt | $220 million |
| Mortgages | $211 million |
| Commingled or pooled funds | |
| Equity | $4,475 million |
| Hybrid debt | $120 million |
| Mortgages | $211 million |
| Direct, separate accounts | |
| Equity | $265 million |
| Hybrid debt | $100 million |
| Total real estate assets | $37,813 million |
| Equity | $14,695 million |
| Hybrid debt | $220 million |
| Mortgages | $22,898 million |

As of June 30, the tax-exempt equity assets of Prudential Realty Group had a market value of $4.402 billion. Contributions received but not invested were $73 million; contributions committed but not received were $265 million.

The hybrid debt holdings had a market value of $120 million. Contributions committed but not received were $100 million. The market value of the mortgages was $130 million. Contributions received but not invested were $81 million.

Of tax-exempt general account assets, $8 million was invested in mortgages.

For tax-exempt assets, the mix by property type was 9% hotel/resort; 14% industrial; 10% multifamily housing; 50% office/commercial; 16% retail; 1% agriculture/land.

The total tax-exempt property portfolio is located 33% in the West; 14% Midwest; 35% East; 18% South.

Prudential Realty Group expects to spend $136 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

Prudential Realty Group offers open-end and closed-end funds and direct separate accounts.

Prudential Realty Group offers Prudential Property Investment Separate Account, an open-end fund that invests in completed, well-leased, income properties diversified by property type and location. The fund has invested contributions of $3.597 billion from 230 clients; $43.5 million has been contributed but not invested.

PRISA II, an open-end fund that invests in moderately opportunistic completed, leased and income-producing properties, has $461.9 million invested for 30 clients; $30 million has not yet been invested.

The Prudential Preference Investment Mortgage Separate Account, an open-end commingled mortgage account that invests in union-built or improved projects, has $63.6 million invested for 19 participants.

Prudential Mortgage Investment Separate Account, an open-end commingled mortgage fund that invests in fixed-rate loans with equity participation, has $62.9 million invested from nine participants.

The Prudential Union Mortgage Account, an open-end fund that invests in construction loans, forward commitments and fixed-rate loans on union-built or improved projects, has $9.2 million invested for 26 investors; $81 million is not yet invested.

Investment clients include Sony Corp. of America, Heavy and General Laborers Local 472, New York State Teachers and Florida State Board of Administration.

The parent company is The Prudential Insurance Co. of America. Its subsidiaries are The Prudential Mortgage Capital Co., The Prudential Property Co., The Prudential Home Mortgage Co. and Prudential Real Estate Affiliates.

Paul Firstenberg, executive vice president-portfolio management, is in charge of making property investments. Lester Lockwood, vice president-domestic marketing, is client contact.

## PSI Institutional Realty

1015 Grand Ave., Glendale, Calif. 91201; (818) 244-8080

| | |
|---|---|
| Tax-exempt real estate assets | $812 million |
| Equity | $812 million |
| Commingled or pooled funds | |
| Equity | $626 million |
| Direct, separate accounts | |
| Equity | $186 million |
| Total real estate assets | $2,400 million |
| Equity | $2,400 million |

As of June 30, the tax-exempt equity assets of PSI Institutional Realty, a division of Public Storage Inc., had a market value of $563 million. Contributions received but not invested were $53 million; contributions committed but not received were $196 million.

All tax-exempt assets were in industrial properties.

The total tax-exempt property portfolio is located 45% in the West; 12% Midwest; 17% East; 26% South.

PSI Institutional Realty expects to be a net buyer in all regions.

The firm expects to be a net buyer of industrial/mini-warehouse properties.

The firm's main area of concentration over the year will be on managing existing properties.

PSI Institutional Realty offers closed-end funds and separate accounts.

Public Storage Institutional Fund, with nine investors, has $74 million in assets, of which $14 million is to be invested.

PSIF II, with 16 investors, has $108 million in assets, of which $39 million is not invested.

PSIF III, with eight investors, closed in August. The fund has $103 million in commitments.

All three funds are limited partnerships that acquire on an all-cash basis commercial and industrial land sites and develop, own and manage mini-warehouses nationwide.

Investment clients include Ameritech, Connecticut, Kodak and Illinois.

Hugh Horne, president of Public Storage Development Co., is in charge of making property investments. Nori Gerardo, senior vice president, is client contact.

## RREEF

650 California St., Suite 1800, San Francisco, Calif. 94108; (415) 781-3300

| | |
|---|---|
| Tax-exempt real estate assets | $3,072 million |
| Equity | $3,072 million |
| Commingled or pooled funds | |
| Equity | $2,872 million |
| Direct, separate accounts | |
| Equity | $200 million |
| Total real estate assets | $3,495 million |
| Equity | $3,495 million |

As of June 30, the tax-exempt equity assets of RREEF had a market value of $2.724 billion. Contributions received but not invested were $71 million; contributions committed but not received were $277 million.

For tax-exempt assets, the mix by property type was 29% industrial; 36% office/commercial; 35% retail.

The total tax-exempt property portfolio is located 46% in the West; 18% Midwest; 18% East; 18% South.

RREEF expects to be a net buyer in the East and Midwest regions.

The firm expects to be a net buyer of industrial, apartments, retail and office properties.

RREEF expects to spend $28 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The firm's main area of concentration during the year will be rehabilita-

tion/asset management of existing properties.

RREEF offers closed-end funds and separate accounts.

RREEF MidAmerica/East V, with 11 participants, has $50 million invested; $75 million is committed and not yet invested.

RREEF USA Fund III, with 24 participants, has $720 million invested; $53 million is committed and not yet invested.

Investment clients include AT&T, Illinois State Universities, Xerox and New York State Common.

Stanislaw Maliszewski, partner, is client contact.

### Schroder Real Estate Associates

437 Madison Ave., New York, N.Y. 10022; (212) 486-9800

| | |
|---|---|
| Tax-exempt real estate assets | $411 million |
| Equity | $411 million |
| Commingled or pooled funds | |
| Equity | $311 million |
| Direct, separate accounts | |
| Equity | $100 million |
| Total real estate assets | $1,300 million |
| Equity | $1,294 million |
| Mortgages | $6 million |

As of June 30, the tax-exempt equity assets of Schroder Real Estate Associates had a market value of $300 million. Contributions committed but not received were $111 million.

For tax-exempt assets, the mix by property type was 40% office/commercial and 60% retail.

The total tax-exempt property portfolio is located 27% in the West; 8% Midwest; 43% East; 22% South.

Schroder expects to be a buyer in all regions and a seller in the East and South.

The firm expects to be a net buyer of retail, office and industrial/warehouse properties.

Schroder expects to spend $50 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The firm's main area of concentration during the year will be acquisition.

The firm offers closed-end funds, separate accounts and co-investments of specific properties.

Schroder Real Estate Associates offers the Schroder Real Estate Fund A, a closed-end fund with $100 million invested, $62 million committed but not invested and $83 million in interim leverage for capital expenditures. The fund will acquire three or four underutilized, smaller regional or large enclosed shopping centers that will respond to intense property and construction management to be sold within five to seven years.

Investment clients include Eastman Kodak, 3M, General Foods and New York State.

Schroder Center Management Inc. is a subsidiary.

Norman L. Peck, managing director, is in charge of making property investments. John E. Emmanuel, senior vice president, is client contact.

### Sentinel Real Estate Corp.

1290 Avenue of the Americas, New York, N.Y. 10104; (212) 408-2900

| | |
|---|---|
| Tax-exempt real estate assets | $1,218 million |
| Equity | $1,218 million |
| Commingled or pooled funds | |
| Equity | $1,008 million |
| Direct, separate accounts | |
| Equity | $210 million |
| Total real estate assets | $1,436 million |
| Equity | $1,436 million |

As of June 30, the tax-exempt equity assets of Sentinel Real Estate Corp., formerly Security Capital Real Estate, had a market value of $950 million. Contributions received but not invested were $110 million; contributions committed but not received were $158 million.

For tax-exempt assets, the mix by property type was 2% industrial; 84% multifamily housing; 6% office/commercial; 8% retail.

The total tax-exempt property portfolio is located 38% in the West; 10% Midwest; 5% East; 47% South.

The main area of concentration during the year will be acquisitions.

Sentinel Real Estate offers open-end and closed-end funds and separate accounts.

SRE Real Estate Fund, an open-end fund, has invested $812 million; contributions received but not invested are $103 million. The group trust purchases apartments, office, retail and warehouse properties of $5 million to $25 million on an equity basis.

SRE Realty Partners I, a $93 million fund that closed in February, contributions received but not invested of $7 million and contributions committed and not received of $40 million. The limited partnership acquires newer residential properties on an equity basis.

SRE Realty Partners II closes June 30, 1989. The limited partnership will raise up to $250 million and will invest in income-producing apartments nationwide.

SRE Realty Partners III closes Sept. 30, 1989. The limited partnership will invest in and manage commercial, industrial, residential and other properties in key locations.

Investment clients include Ford, GTE, Pennsylvania and Los Angeles County.

John Streicker, president, and four portfolio managers, make property investments. Lewis W. Kresch is client contact.

### State Street Bank and Trust

225 Franklin St., Boston, Mass. 02110; (617) 654-3953

| | |
|---|---|
| Tax-exempt real estate assets | $455 million |
| Equity | $213 million |
| Hybrid debt | $139 million |
| Cash | $103 million |
| Commingled or pooled funds | |
| Equity | $213 million |
| Hybrid debt | $139 million |
| Total real estate assets | $455 million |

As of June 30, the tax-exempt equity assets of State Street Bank and Trust Co. had a market value of $213 million.

The hybrid debt holdings had a market value of $139 million.

Cash received or committed but not earmarked for a specific investment totaled $103 million.

For tax-exempt assets, the mix by property type was 33% industrial; 24% office/commercial; 41% retail; 2% residential.

The total tax-exempt property portfolio is located 43% in the West; 16% Midwest; 14% East; 27% South.

State Street expects to spend $7 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

State Street offers closed-end commingled real estate funds in conjunction with Aldrich, Eastman and Waltch. The AEW-State Street Real Estate Fund VI will close to subscriptions in December. The fund invests in well-located, quality projects that are actively managed.

Investment clients include CBS, GTE, World Bank and Wisconsin Electric.

The parent company is State Street Boston Corp.

Robert E. Kilroy, vice president, is in charge of making property investments. Peter E. Braun, vice president, is client contact.

The next edition of PROPERTY will appear Nov. 28.

### TCW Realty Advisors

400 S. Hope St., Suite 600, Los Angeles, Calif. 90071-2899; (213) 683-4200

| | |
|---|---|
| Tax-exempt real estate assets | $2,285 million |
| Equity | $1,832 million |
| Hybrid debt | $453 million |
| Commingled or pooled funds | |
| Equity | $1,284 million |
| Hybrid debt | $280 million |
| Direct, separate accounts | |
| Equity | $548 million |
| Hybrid debt | $173 million |
| Total real estate assets | $2,285 million |

As of June 30, the tax-exempt equity assets of TCW Realty Advisors had a market value of $1.164 billion. Contributions received but not invested were $38 million; contributions committed but not received were $630 million.

The hybrid debt holdings had a market value of $453 million.

For tax-exempt assets, the mix by property type was 38% industrial; 47% office/commercial; 12% retail; 3% land.

The total tax-exempt property portfolio is located 63% in the West; 1%


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AMB INVESTMENTS, INC.

345 California Street, 29th Floor

San Francisco, California 94104

(415) 956-5100

Midwest; 27% East; 9% South.

TCW expects to be a net buyer in all regions.

The firm expects to be a net buyer of industrial, office and retail properties.

TCW expects to spend $10 million on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The firm's main area of concentration during the year will be acquisitions.

TCW offers direct separate account investment management and closed-end commingled funds.

TCW Land Fund I, with 13 participants, has $72 million invested and $175 million committed but not yet invested. TCW Realty Fund V, with 64 participants, has $88 million invested and $525 million committed but not yet invested.

The group trusts invest nationally in general purpose industrial, office and retail properties. Transactions are structured with convertible debt if appropriate, but most are straight equity.

Investment clients include Pacific Telesis, U S WEST, McDonnell Douglas and Illinois Teachers.

The firm is a joint venture with Trust Co. of the West.

William Krauch, partner-director of acquisitions, is in charge of making property investments. Bruce Ludwig, senior partner, is client contact.

PROPERTY's next issue will be Nov. 28.

### The Travelers

1 Tower Square, Hartford, Conn. 06183; (203) 277-0111

| | |
|---|---|
| Tax-exempt real estate assets | $449 million |
| Equity | $405 million |
| Mortgages | $44 million |
| Commingled or pooled funds | |
| Equity | $374 million |
| Mortgages | $44 million |
| Direct, separate accounts | |
| Equity | $31 million |
| Total real estate assets | $19.803 million |
| Equity | $1.569 million |
| Mortgages | $18.234 million |

As of June 30, the tax-exempt equity assets of The Travelers had a market value of $405 million. The market value of the mortgages was $44 million.

Of the tax-exempt general account assets, $32 million was invested in equity real estate and $10.211 billion in mortgages.

For tax-exempt assets, the mix by property type was 5.7% hotel/resort; 13.5% industrial; 1.9% multifamily housing; 57.1% office/commercial; 11% retail; 10.8% timber/agriculture.

The total tax-exempt property portfolio is located 25.5% in the West; 32.1% Midwest; 8.7% East; 33.7% South.

The Travelers expects to spend $700,000 on rehabilitation, renovation, expansion or modernization of existing properties in 1988.

The main area of concentration during the year will be rehabilitation and asset management of existing properties.

The Travelers offers open-end and closed-end funds and separate account management.

Separate Account "R", an open-end fund, has $327.5 million invested in equity for newly constructed properties from 44 clients; $44.1 million invested in first and junior mortgages for two clients; and $112.9 million in a balanced portion of the fund for 92 clients.

Separate Account "T-II", a closed-end fund, is open for subscription. The fund invests in timberland.

Investment clients include Consolidated Edison, Pennsylvania Blue Shield, Sisters of the Holy Cross and Memphis Light, Gas and Water.

Subsidiaries are The Prospect Co. and Travelers Mortgage Services.

Raymond Morgan, vice president, is in charge of making property investments. B. Thomas Willison, vice president, is client contact.

### Union Labor Life Insurance

111 Massachusetts Ave. N.W., Washington, D.C. 20001; (202) 682-0900

| | |
|---|---|
| Tax-exempt real estate assets | $413 million |
| Mortgages | $413 million |
| Commingled or pooled funds | |
| Mortgages | $413 million |
| Total real estate assets | $887 million |
| Mortgages | $887 million |

As of June 30, the tax-exempt mortgage assets of Union Labor Life Insurance Co. had a market value of $136 million. Contributions received but not invested were $277 million.

Of tax-exempt general account assets, $473 million was invested in mortgages.

Investment by property type was 3% hotel/resort; 16% industrial; 3% multifamily housing; 57% office/commercial; 19% retail; 1% restaurants; 1% single-family housing.

Union Labor Life offers open-end funds and separate accounts.

Mortgage Separate Account J, "J for Jobs" invests in a diversified mortgage portfolio. Investors buy shares of mortgage investments made primarily on construction projects using union workers.

The parent company is ULLICO Inc.

E.R. Saathoff, vice president-mortgage department, is in charge of making property investments. Peter Mulligan, vice president-group sales and marketing, is client contact.

### Wells Fargo Realty Advisors

595 Market St., 15th Floor, San Francisco, Calif. 94105; (415) 477-5800

| | |
|---|---|
| Tax-exempt real estate assets | $850 million |
| Equity | $219 million |
| Hybrid debt | $296 million |
| Mortgages | $335 million |
| Commingled or pooled funds | |
| Equity | $217 million |
| Hybrid debt | $118 million |
| Mortgages | $335 million |
| Direct, separate accounts | |
| Equity | $2 million |
| Hybrid debt | $178 million |
| Total real estate assets | $971 million |
| Equity | $340 million |
| Hybrid debt | $296 million |
| Mortgages | $335 million |

As of June 30, the tax-exempt equity assets of Wells Fargo Realty Advisors had a market value of $219 million.

The hybrid debt holdings had a market value of $124 million. Contributions received but not invested were $69 million; contributions committed but not received were $103 million. The market value of the mortgages was $335 million.

For tax-exempt assets, the mix by property type was 40.7% industrial; 4.4% office/commercial; 44.7% retail; 10.2% apartments.

The total tax-exempt property portfolio is located 82.3% in the West and 17.7% South.

Wells Fargo expects to be a net buyer in the West, East and Midwest regions and a net seller in the South.

The firm expects to be a net buyer of retail, industrial and apartments.

The main area of concentration for the year will be acquisitions.

Wells Fargo offers open-end commingled funds and separate accounts.

The Wells Fargo Real Estate Equity Fund has $202 million in assets from 150 participants. The fund emphasizes development-oriented real estate transactions where existing properties might be upgraded, expanded or renovated. Transactions are typically structured as either joint development ventures or developmental participating mortgages.

Investment clients include Ohio Public Employees, GM and Old Kent Bank.

The parent company is Wells Fargo & Co. Wells Fargo Realty Finance is a subsidiary.

Doug Hayek, director of acquisitions, is in charge of making property investments. J. Michael Johnson, director of marketing, is client contact.

# Assets climb

*Continued from page P13*

While acknowledging the boost from the Cadillac Fairview deal, John S. Lillard, president of JMB Institutional, said the firms also were successful in other endeavors. "For example, we have put together a $200 million apartment limited partnership," he noted.

Aldrich, Eastman & Waltch Inc., Boston, and Richard Ellis Inc., New York, broke into the top 10 this year. AEW placed eighth, up from last year's 12th place ranking, while Richard Ellis moved up to 10th from 18th.

F.I.A. Associates, Sacramento, Calif., and Corporate Property Investors, New York, both fell out of the top 10.

The rest of the top 10 tax-exempt real estate managers, and this year's ranking, were Equitable Real Estate Investment Management Inc., New York, second; The Prudential Realty Group, Newark, N.J., fourth; Heitman Advisory Corp., Chicago, fifth; Aetna Life & Casualty, Hartford, Conn., sixth; RREEF, San Francisco, seventh; and The Boston Co. Real Estate Counsel Inc., Boston, ninth.

The Cadillac Fairview deal also boosted the rankings of Copley and JMB among the 10 largest tax-exempt equity real estate managers. Copley, which finished fourth last year, was ranked first, while JMB, eighth last year, finished third.

Richard Ellis also was new to the top 10 equity real estate managers, finishing ninth. New York-based Eastdil Realty Inc., whose tax-exempt equity real estate assets fell almost 75% to $394 million, dropped out of the top 10.

Martha Wallau, a vice president at Eastdil, said assets declined because, in part, the firm lost an approximately $650 million account with the California State Teachers' Retirement System, Sacramento.

"We had been their sole real estate adviser for the first three years," of their real estate program development, she said. The fund recently switched to a multiple-adviser approach.

The rest of the decrease in assets was from "opportunistic" selling of properties in various accounts, Ms. Wallau added.

The rest of the top 10 tax-exempt equity real estate firms, and their rankings, were Equitable Real Estate, second; Heitman, fourth; Prudential Realty, fifth; Aetna, sixth; RREEF, seventh; LaSalle Advisors Ltd., Chicago, eighth; and Corporate Property Investors, 10th.

Among the top 10 managers of tax-exempt hybrid debt assets, AEW leaped to the top spot from its third place ranking last year. "That's an area we first pioneered back when the firm was founded in 1981," said Kristen Fuller, marketing manager.

Hybrid debt is "something we found beneficial to our clients in the past and we continue to do it. It has been a good year for us all around," she added.

TCW Realty Advisors, Los Angeles, finished in the 10th spot, pushing Houston-based L.J. Melody & Co. to 11th.

McMorgan & Co., San Francisco, and Latimer & Buck Inc., Philadelphia, again finished first and second, respectively, among the top 10 managers of tax-exempt mortgage assets.

Two firms new to this year's survey were ranked among the top 10 firms. First Interstate Mortgage Co. of Illinois, Chicago, finished third, while ASB Capital Management Inc., Washington, was ranked eighth. Citicorp Real Estate Investment & Management, New York, also cracked the top 10, finishing ninth. ■

# Foreign clients

*Continued from page P13*

able Life Assurance Society of the United States, Equitable Real Estate's parent company.

"We were the first, back in 1981, to enter into a joint venture with a Japanese institutional client and we now have nine joint ventures with Japanese investors," said Jonathan Miller, a vice president in Equitable Real Estate's New York office.

Equitable's Japanese clients include Nippon Life Insurance, Osaka; and Dai-ichi Mutual Life, Asahi Life Insurance and Meiji Life Insurance, all of Tokyo.

"Our business is investing capital for clients in U.S. real estate. Offshore sources (of capital) are a very important part of our business," Mr. Miller said.

"We are seeking a diversification in our source of funds," added Suzanne V. Franks, also a vice president in Equitable Real Estate's New York office.

Prudential Realty Group, Newark, N.J., reported a current market value of $1.8 billion in overseas business relationships. Of that amount, $1.3 billion was from Japanese investors.

In addition, Armand Pacher, vice president-international marketing and product development for Prudential Realty, said the completion value of various projects involving offshore partners should total $2.6 billion, of which $1.1 billion represents foreign interests.

"While most of our foreign investors are represented by Japan and Europe, we have had increasing interest from other parts of the world, including other parts of Asia," Mr. Pacher said.

Other firms with substantial foreign business relationships, and the amount they reported, include:

- Schroder Real Estate Associates, New York, with $889 million from non-U.S. clients;
- Landauer Advisors Inc., New York, $639.2 million;
- Heitman Advisory Corp., Chicago, $632 million;
- RREEF, San Francisco, $403 million;
- Chesterton International, New York, $371 million; and
- Eastdil Realty Inc., New York, $325 million. ■

# Companies sold realty holdings, '87 reports show

**By Joanne Friedrick**

Sales of real estate assets paced acquisitions among porations in 1987, a PROPI review of corporate annual reports shows.

Corporations sold almost $50 million in real estate, and acquired about $280 million, according to the review of more than 200 annual reports, of which 50 detailed real estate operations.

Real estate sales were led by **Goodyear Tire & Rubber Co.**, Akron, Ohio, which sold two Arizona agricultural, development and resort hotel subsidiaries. The sale, totaling $220.1 million, was contingent on Goodyear's purchase of $40 million in assets from the Arizona properties.

**Chevron Corp.**, San Francisco, which also was busy in the acquisitions area, added to its revenues through the sale of $53 million in land, $77 million in residential units and another $12 million in agricultural and other real estate.

On a much smaller scale, **Barrett Resources Corp.**, Denver, an oil and gas company, continued on its mission to get out of the real estate acquisitions business in 1987 by selling $43,000 in real estate.

**USX Corp.**, Pittsburgh, which registered its 18th profitable year in the real estate business through its USR Realty Development subsidiary, booked $43 million from sales of realty in Alabama, California, Ohio and Virginia.

About $86 million in properties were marketed by CSX Realty, the subsidiary of **CSX Corp.**, Richmond, Va. It also evaluated 52 major parcels for future sale or development.

And JCP Realty, the real estate arm of **J.C. Penney Inc.**, Dallas, had gains of $9 million from the sales of shopping center interests; it has interests in 80 projects, about 30 of which were in the development stage in 1987.

Among the acquisitions listed in the annual reports were:

- **American General Corp.**, Houston, through its Mortgage/Real Estate Cos. subsidiary, owns 75% of American Newland Associates, which purchased the land development business of Genstar Land-U.S.A. and its joint-venture interests for $200 million.

American Newland has six master-planned residential community projects under way.

- **Chevron**, which has two real estate subsidiaries — Chevron Land & Development Co. and Huntington Beach Co. — acquired the remaining 34% interest in Huntington Beach during 1987 for $80 million.
- **Xerox Corp.** purchased a 25% interest in VMS Realty Partners, Chicago. Stamford, Conn.-based Xerox, through its Xerox Credit Corp. unit, invested $80 million in VMS and provided it $120 million in loans. VMS manages more than $6 billion in real estate.

Companies nationwide also continued or started major real estate projects during 1987:

- **Chubb Corp.**, Warren, N.J., changed its focus to institutional and international investors for its real estate products, including office projects in New Haven, Conn.; Monmouth County, N.J.; and Bucks County, Pa.; a 154-unit high-rise oceanfront residential development in Florida; and an 80-unit inland townhouse project.
- **United Water Resources**, Harrington Park, N.J., a newcomer to the real estate development business, had two joint ventures in the works in 1987. Lake Forest Park, in Emerson, N.J., will be a combined business and residential development. Faircliff Plaza, Fairview, N.J., will be an eight-story, 200-unit condo. ■

# Captive funds

*Continued from page 1*

1988, is the largest captive domicile in the United States.

According to the 1988 Captive Insurance Company Directory, published by Tillinghast, Stamford, Conn., captives have roughly $14 billion in investible money. Officials at Tillinghast, an insurance industry consultant, emphasized this is an estimate, because of the difficulty in getting data from captives.

Most of that money goes to external managers. Investment managers interviewed said a few captives might have their assets managed by the treasury department of their parent company.

Captives' offshore history means international managers, or U.S. managers with international ties, hold the bulk of the captives' asset management business. "That's a historical accident," said Keith Brown, chairman of WorldInvest Ltd., London, which runs about $500 million for captives.

Most captives also have tended to invest in Eurodollar-denominated bonds to make their offshore status clear to U.S. tax and regulatory authorities, but have avoided bonds in other currencies because their liabilities often are denominated in U.S. dollars.

Captives also often have sought to match the duration of their assets to that of their liabilities, as a pension fund would with an immunized bond portfolio. The result of this has been heavy investment in intermediate-term Eurodollar bonds.

Now, with tax advantages for offshore captives fading and more captives being set up in the United States, captive insurers feel freer to invest in U.S. Treasury securities, although Eurodollar bonds still are the most popular investment, managers said.

(Although captives never were prohibited from investing in Treasuries, to do so would have invited regulatory scrutiny, the managers noted.)

Also, as captives have grown, they have moved to a less conservative investment posture than the currency-matched, duration-matched one. This has meant investment in foreign currency-denominated bonds, usually with the currency hedged; purchase of longer-maturity bonds in all currencies; and even a few small investments in common stocks, both in the United States and abroad. An exact asset breakout wasn't available from most managers.

"With a nascent captive, we are very careful to make sure their assets and liabilities match as closely as possible," said Peter Flynn, North American representative for N.M. Rothschild Asset Management Ltd., London, which runs $1.7 billion for captives. A mature captive can go farther out on the yield curve and take a longer-term investment view, he said.

Also, as they learn more about different types of investments, executives of the insurance companies have become more comfortable with portfolios diversified beyond intermediate Eurodollar bonds, said Jeremy Lodwick, vice president of Morgan Grenfell Investment Services Ltd., London, which runs $1.3 billion for captives.

Mr. Flynn said captives need to be free to concentrate on their insurance business and not be bothered about the investment business. "We're very aware that the investment side should run smoothly," he said.

Managers who are more accustomed to doing business for pension funds need to be sensitive to the captives' different accounting and reporting requirements, added Felicity Hammond, vice president in J.P. Morgan Investment Management Inc.'s London office, which runs $2.3 billion for offshore captives. Another $300 million for U.S. captives is managed in J.P. Morgan's New York office.

Opinion is divided as to whether captives provide a growth area for money management.

"People have recognized you can make losses as well as profits from insurance," Mr. Brown said, pointing out this has dampened corporations' enthusiasm for setting up captives.

Still, captive's function as a self-insurer for their parent corporations is legitimate, said Dick Carpenter, a managing director of Chase Investors Management Corp., New York. An affiliate, Chase International Investment Group, London, manages about $1 billion for captives. ■

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Investment Age

# LBO funds' returns shine

## Go as high as 163%

By Marlene Givant Star
and Marcia Parker

Eight leveraged buy-out funds selected by a new Common Fund-sponsored program for colleges and universities boast gross annual returns ranging from 26% to 163% for periods of from seven to 19 years.

Together, those eight funds are in the process of raising more than $3 billion for leveraged buy-outs, with a small chunk coming from the schools. The bulk of the money is coming from leading institutional investors and some individuals. Most of the money will be earmarked for equity investments, with some allocated to debt investments with equity participation.

Individual investors in one of the eight funds chosen by The Common Fund, McCown de Leeuw & Co., San Francisco, include the chief executives of Wells Fargo Bank, Chevron Corp., Sutter Hill Ventures and Greylock Mountain Industries.

The Common Fund and several other leading educational institutions have set up a limited partnership called Endowment Partners 1 that is targeted to raise about $125 million from colleges, universities and independent schools for leveraged buy-outs (*See related story on this page*). The eight funds selected represent a mix of large, well-known players like Merrill Lynch Capital Partners, New York, the second largest participant in the leveraged buy-out business after Kohlberg Kravis Roberts & Co., New York, and specialists such as San Francisco-based McCown de Leeuw, which will focus on middle-market acquisitions.

Through The Common Fund's selection of these funds, a good deal of hard-to-get information on returns, management fees, profit splits and investors was made available. All of the information on the funds came from material supplied to The Common Fund.

Comparing the funds, it is clear each structures management fees differently. Profit splits are more standard at 80-20. Looking at the funds as a group, an ever growing number of institutions are investing in the funds, from corporate pension funds to public pension funds to insurance companies.

Merrill Lynch raised $13.8 billion for 18 transactions between 1981 and 1987. Its Capital Appreciation Fund I, which raised $400 million in 1985 and earned an annualized gross return of about 84% per year, is fully invested.

The New York investment bank is raising total commitments of $2.2 billion for Fund II and will invest $300 million of its own capital. The Common Fund invested $10 million from its equity fund for Merrill Lynch's Fund II and arranged to hold open another $25 million for possible investment by Endowment Partners.

Besides The Common Fund, the pension funds of Boeing Co., Eastman Kodak Co., the State of Wisconsin and Aetna Life & Casualty Co.; Equitable Life Assurance Society of the United States; Metropolitan Life Insurance Co.; Fuji Bank; Bank of America; Wells Fargo; Northwest Mutual Life Insurance Co.; and Bankers Trust Co. are among the other investors.

The annual management fee is 1.5% of capital commitments until the fund is fully invested, then 0.75%. Investors and Merrill split profits including investment banking fees paid to the fund 80-20, with investors receiving a 12% preferred return.

Clayton & Dubilier, New York, is, after KKR, the largest private equity manager not affiliated with an investment bank. It has made $5.2 billion in acquisitions to date, emphasizing operational issues as opposed to financial restructuring. The firm will invest in private companies or divisions of companies with a

*Continued on page 29*

## Schools seek cut of profits

By Marlene Givant Star

FAIRFIELD, Conn. — Hoping to give colleges and universities the chance to reap the high return rewards associated with leveraged buy-outs, The Common Fund and several large colleges have formed a limited partnership to pool their resources and invest in the wave of buy-outs reshaping corporate America.

If this approach catches on among endowments, it could unleash a flood of new capital to leveraged buy-outs. With assets of $55 billion, endowments are a large, untapped source of capital for private investments, according to buy-out specialists and George Keane, president of

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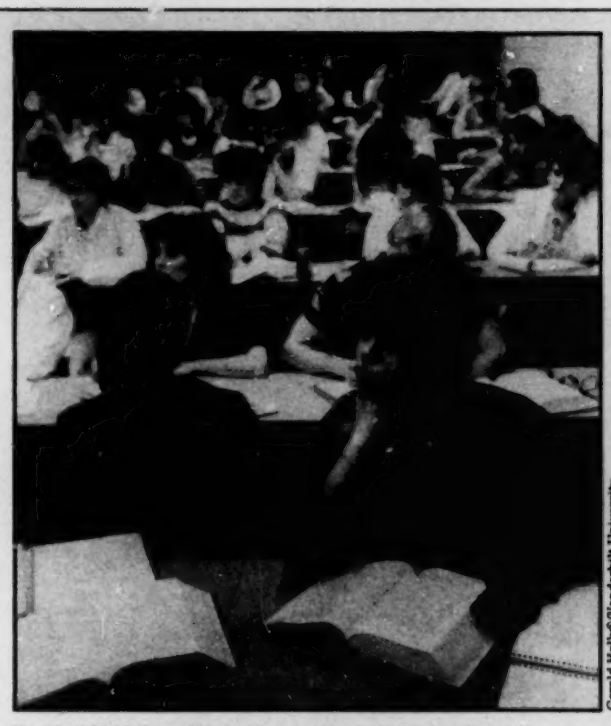

Gerald Holly©/Vanderbilt University

**Vanderbilt University — where these students attend law school — is one of several universities believed to be interested in The Common Fund's leveraged buy-out venture. They hope to reap big returns from their investments.**

# Lease deals crossing more borders

By Marcia Parker

The hottest deals in the leasing market today are cross-border, tax-based leveraged leasing transactions, which bring together companies in one country that are trying to finance an asset with investors in other, high-tax-rate countries who can use the tax benefits associated with that asset.

Cross-border lease financing, sometimes called double-dip leasing, really took off in the early 1980s.

**Financing**

Interest has been growing steadily ever since, although the number of these very complex transactions is still relatively small.

"You have a pool of equipment in search of a pool of taxable investors," explained Robert Imershein, vice president at Bankers Trust Co., New York, an active player in cross-border transactions. "You look for high tax jurisdictions in the world and then you marry them."

Tracking the development of this segment of the leasing industry is tough. Lessees and lessors and their advisers are highly secretive about the deals they do, how they are structured, which countries are involved and who supplies the financing.

In some countries — including the United Kingdom, United States, Australia and, recently, Hong Kong — tax authorities have pulled the rug out from under these transactions, making them unattractive or impossible. And some governments — including Japan — are moving to reform tax laws and make cross-border leasing deals harder and less lucrative.

To date, airlines have been doing most of the deals, lining up financing in two key markets, Japan and France. Airlines that have done cross-border deals include World Airways, United Airlines, American Airlines, AirFrance, Airbus, Pan American Air-

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LATE NEWS

## British firm extending its reach

LONDON — Tyndall Holdings PLC of London, with $2 billion under management, is rumored to be considering a $170 million bid for G.T. Capital Management PLC, London.

G.T. Capital has nearly $6 billion in assets under management. Its U.S. subsidiary, G.T. Capital Management Inc., San Francisco, managed $900 million in assets March 31.

Jim Mellon, group marketing manager for Tyndall, declined to comment on the rumor, which has been published in the Times of London. Anthony Dick, director of G.T., said, "No talks are taking place."

Last week, Tyndall acquired Newport Pacific Management Corp., San Francisco, for about $2.2 million in cash and securities. The acquired firm, which runs $85 million, will be renamed Tyndall-Newport Management.

In late July, Tyndall bought a 25% interest in Horgan Tattersall Investment Counsel Ltd., a Toronto-based money manager with $50 million in assets under management.

## AMR executive accepts new job

DALLAS — M.E. Devine, former director of banking and investments at American Airlines Inc. and vice president of short-term investments at AMR Investment Services, has left to become treasurer and chief financial officer at Evergreen Media Corp., Dallas.

Mr. Devine, who spent 13 years at American, will oversee all corporate finance activities, banking relations, cash management and borrowing at the Dallas-based media holding company.

William F. Quinn, president of AMR Investment Services, said Mike Fields, who served as primary short-term portfolio manager under Mr. Devine, will assume his former boss' responsibilities.

## Steel plans assumed by PBGC

WASHINGTON — The Pension Benefit Guaranty Corp. formally has become trustee of three Kaiser Steel Corp. pension plans covering more than 7,000 participants.

The plans were taken over through a distress termination by the PBGC in February 1987 when Kaiser, of Colorado Springs, Colo., filed for reorganization under federal bankruptcy laws. Together the plans have assets of about $30 million, and an unfunded liability of more than $200 million.

In February 1987, the PBGC became trustee of a fourth plan that was underfunded by $27 million when the plan didn't have any assets to pay retirees.

In a related but unusual step, the PBGC has given the company a $4 million line of credit to fund its litigation against former Kaiser top executives, a PBGC official said. Proceeds from the litigation, if successful, will be the company's biggest assets, and the loan is more than adequately secured, said the official.

## Funds add to manager rosters

• HONOLULU — The $12 million retirement plan of Kuakini Health Systems Inc. hired Harris Bretall Sullivan & Smith Inc., San Francisco, to manage $5 million in an equity and cash equivalent approach, according to Raymond Abe, vice president.

Mr. Abe said the account was formerly handled by Thompson/Rubinstein Investment Management Inc., Portland, Ore., but was changed on the advice of the fund's consultant, Bateman, Eichler, Hill Richards Consulting Group, Honolulu.

• LINTHICUM HEIGHTS, Md. — The $600 million Masters, Mates & Pilots Pension Fund has hired Nikko & Associates Inc. to run a $10 million global balanced account, said John Sokolowski, administrator. Assets came from other managers.

• FORT WORTH, Texas — The $400 million Employees' Retirement Fund of the City of Fort Worth has allocated $50 million to new investments in real estate and fixed income.

Pacific Financial Management Co., Newport Beach, Calif., will manage $40 million in a bond portfolio, said George Nicolaides, the retirement fund administrator. The assets had been run in a fixed-income account by Hibernia National Bank, New Orleans.

The fund also transferred a $10 million real estate investment to TCW Realty Advisors, Los Angeles, from Aetna Life & Casualty Co., Hartford, Conn. Mr. Nicolaides declined to give reasons for the terminations.

• PHILADELPHIA — The $190 million Philadelphia Gas Works Retirement Reserve fund has hired Nikko & Associates Inc., New York, to run a $5 million international equity portfolio, said Albert Childs, deputy director of finance.

The move was part of a restructuring started in April 1987.

## Candidates address USA group

WASHINGTON — Vice President George Bush, the Republican presidential candidate, said he would support legislation to promote shareholder rights if elected.

Massachusetts Gov. Michael Dukakis, the Democratic nominee, did not respond directly to the questions put to him by the

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DEPARTMENTS


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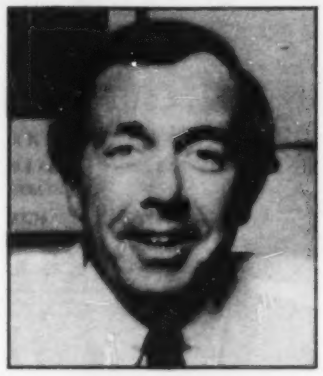
Vol. 16, No. 21 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1988.

# Ramseyer exits; PRA shuts down

By Chuck Paustian

CHICAGO — William L. Ramseyer has decided to end his consulting career and join Chicago-based JMB Institutional Realty Corp. as an executive vice president.

By doing so, he closes the book on Pension Realty Advisors Inc., the San Francisco firm he founded in 1982.



William Ramseyer has decided to leave the consulting business to join JMB.

JMB also has agreed to purchase a "controlling" interest in PRA Securities Advisors L.P., a real estate securities research and investment firm, said John S. Lillard, president of JMB Institutional. Mr. Ramseyer, who was president of Pension Realty Advisors, will remain a partner of PRA Securities and a member of the firm's investment committee.

The only connection between Pension Realty Advisors and PRA Securities is Mr. Ramseyer's ownership interest in both firms.

Paul S. Saint-Pierre, managing director of Pension Realty Advisors, announced the board of directors voted to discontinue the firm's consulting business as a result of Mr. Ramseyer's departure.

As of Sept. 1, Pension Realty Advisors had eight retainer and three non-retainer institutional clients.

Mr. Saint-Pierre said he and his staff of eight will continue to offer the same consulting and advisory services — including the Closed-End Realty Fund Report, a quarterly publication on institutional real estate investment products — to institutional investors through Spear Street Advisors Inc., a San Francisco firm founded simultaneously with Pension Realty Advisors.

Spear Street Advisors "offers more services than PRA, not less," Mr. Saint-Pierre said. "We offer an entire menu of real estate consulting services, not just pension fund real estate services."

He also said Spear Street Advisors will work on a fee-based, project basis rather than on a retainer basis.

Mr. Ramseyer, who will relocate to the Chicago area from his home in Piedmont, Calif., said he decided to make the switch because he wanted to take a more active role in the formation of real estate portfolio strategies.

"In a sense I'll be doing what I've been doing in the past, only now with the ability to create the product," he said.

"I spent six good, hard years — long years — in that business.

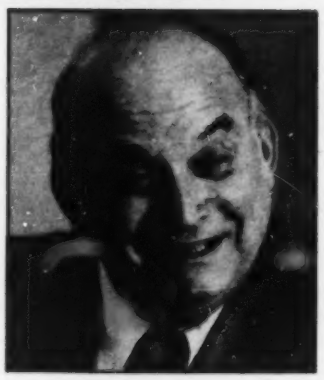
*Continued on page 31*

# Ballard curtails pioneering real estate career

By Andrew Reinbach

NEW YORK — Claude M. Ballard is retiring from Goldman, Sachs & Co. in November, soon after his 59th birthday, to tend his own investments and work part-time for Goldman. He leaves behind a career that helped define today's real estate business.

"My wife has been pushing me for years to retire. She thought she had me when I left Prudential (Insurance Co.) in 1981, but I did an end run when Goldman, Sachs made me an offer, so she's been pushing ever since," he said.



Claude Ballard will reduce his workload at Goldman, Sachs effective this November.

Mr. Ballard will be working on a consulting basis for Goldman — he said he'll keep his office in New York and will put in an average of a week to 10 days per month "wherever I'm needed, anywhere in the world" — lecturing and paying more attention to his independent real estate business.

During the past several years, he and three partners at Goldman — Eugene Mercy Jr., Lewis M. Eisenberg and George E. Doty — assembled a big portfolio of agricultural land and commercial real estate separate from Goldman, and he expects to be more active in that business from now on.

Mr. Ballard will be living in Little Rock, Ark., where he's building a house, to be near the bulk of his holdings, and in Bal Harbour, Fla., where he has owned a house for several years. He also will be keeping his New York apartment.

Mr. Ballard, together with Meyer Melnikoff, created pension fund real estate investment in the 1970s by reifying Prudential's PRISA, the first successful commingled real estate fund.

His arrival at Goldman in 1981 helped transform Wall Street real estate investment banking from service functions of most corporate finance departments into independent, transaction-based profit centers, as well as marking the beginning of Goldman's domination of that business.

"Claude is one of the great gurus of our industry, a man of thought and a man of action," said Don Williams, managing partner of the $14 billion Trammell Crow Co., Dallas, generally regarded as the nation's largest real estate developer. "He was one of the early intellectual leaders, a very strong person with very sound ideas, and he was instrumental in creating modern real estate finance."

This is high praise indeed, coming from the partner of a man who once was one of Mr. Ballard's most bitter adversaries. Trammell Crow and Mr. Ballard squared off over the mid-1970s workout negotiations for the Crow empire,

*Continued on page 29*

# Partners file suit to oust Brignoli

By Barry B. Burr

NEW YORK — Duane G. Roberts, John J. Curley and another partner have filed suit in federal court against Richard Brignoli seeking his removal from control of or dissolution of Brignoli, Curley & Roberts Associates.

The action, filed by the three in U.S. District Court in New York, follows the abrupt departures during the past 10 months of Messrs. Roberts, Curley and James Karanfilian, the third partner and plaintiff, from active participation in one of the most successful money management firms in recent years.

In a separate suit, filed in the same court, Mr. Roberts charges breach of contract, claiming he was terminated from employment without cause and not paid compensation, including a percentage of the fees paid by clients, as provided under an agreement. Mr. Roberts, who alone is seeking some $760,000 and costs, led the firm's marketing. He left the firm in March.

A third suit, filed in New York Supreme Court by James M. Mallick of Beverly Hills, Calif., seeks $32,432 plus interest and other costs, claiming default on a loan advanced to Brignoli, Curley & Roberts in 1984.

*Continued on page 30*

# International soars on 1 move

By Curtis Vosti

International money managers received more than $4.5 billion in new business during the third quarter — more than 90% of it from the California Public Employees' Retirement System — making it far and away the most lucrative market for new business during the three-month period.

Domestic equities drew $1.3 billion and fixed income drew just a shade more than $1 billion in new allocations during the third quarter.

Domestic asset allocators — including tactical and strategic asset allocators — and balanced accounts each drew a reported $747 million, and real estate investors placed $288 million.

The figures were drawn from reports of new manager hires listed in *Pensions & Investment Age* during the third quarter. There were other hirings reported but not itemized, such as the $900 million in equity assets to be doled out among seven managers by the State of Alaska Trust Funds. While there most likely were other unpublicized hirings, the tabulation gives insight into the third-quarter movement of vast amounts of institutional money.

The movement toward international investing should continue, according to Ed Baker, director of marketing at BARRA, the Berkley, Calif.-based consulting firm.

Public pension funds — which have been leading the latest push overseas — tend to have to go through lengthy processes before they can commit a sizable sum to a new investment strategy, Mr. Baker said, and the rush to international stocks probably won't abate because of that lengthy process.

Almost $1.5 billion in the third quarter was reported placed in indexed accounts, $1.05 billion of that in an international indexed account placed by the California Employees' fund, managed by State Street Bank and Trust Co., Boston.

Eleven other international managers hired by the California fund received amounts ranging from $100 million to $500 million. First Chicago Investment Advisors, which picked up $100 million from the fund, added $71 million from three other clients during the third quarter, making it one of the most successful managers in drawing new clients for the quarter.

The California allocation also helped some of the quarter's recipients of the most new institutional money — solely because of the size of the fund's accounts.

**Most new accounts* 3rd quarter 1988**

| Firm | New accounts |
|---|---|
| Wells Fargo | 6 |
| Copley Real Estate | 5 |
| First Chicago | 4 |
| The Common Fund | 4 |
| Invesco | 4 |

* As reported in *Pensions & Investment Age*

**Most new assets* 3rd quarter 1988**

| Firm | $ millions |
|---|---|
| State Street Bank | 1,250 |
| Wells Fargo | 660 |
| First Investment | 650 |
| Baring International | 515 |
| Warburg | 500 |
| Fiduciary Trust | 500 |

Warburg Investment Management International and Fiduciary Trust Co. International, both of New York, made the list of top recipients of institutional money with a one-shot $500 million account to each from California. Baring International Investment Ltd., Boston, picked up $500 million from California for a total of $515 million in new money for the quarter. State Street Bank added a $200 million account from the James River Corp. of Virginia, Richmond, to California's $1.05 billion.

Wells Fargo Investment Advisors placed the most new reported and confirmed accounts, with six, and also placed among the managers with the most new assets reported, with $660.4 million (without the benefit of an account from the California fund) reported from four of those new clients. Two new clients confirmed the placement with Wells, but declined to disclose figures.

First Investment Management, Oklahoma City, was tabbed by the Oklahoma Public Employees' Retirement System for a $650

*Continued on page 30*

# Wedtech union officials indicted

By Marcia Parker

NEW YORK — A federal grand jury has indicted two officials of Local 875 of the Teamsters union on charges of taking payoffs from officers of Wedtech Corp., the military contractor at the center of a Pentagon scandal, and of fraud and embezzlement involving the Wedtech welfare fund.

The Elmhurst, N.Y., Teamsters local served as the sole and exclusive collective bargaining agent for production workers, drivers, helpers and warehouse employees for Wedtech. The local administered the Louis Hirsch Memorial Welfare Fund, the employee welfare benefit plan for Wedtech production employees.

The grand jury indictment charges two pension fund business officials — Richard Stolfi and Frank Sasalino — with taking more than $100,000 in payoffs from Wedtech officers and employees to keep labor peace and negotiate collective bargaining agreements favorable to Wedtech; concealing thousands of dollars in kickbacks; and embezzling money from the welfare fund.

In August, a federal jury convicted Rep. Mario Biaggi, D-N.Y.; John Mariotta, Wedtech's founder and at various times its president, chief executive officer and chairman of the board; and three others of racketeering in the Wedtech corruption scandal. They were convicted of dispensing millions in bribes to win no-bid government contracts set aside for minority-owned businesses.

The Teamsters indictment charges that named but unindicted co-conspirators Mr. Mariotta; Fred Neuberger, who served at various times as vice president in charge of marketing, president and chief operating officer, chief executive and chairman of the board; and others "illegally diverted funds from Wedtech" and made "illegal payments" to officials and representatives of labor unions, welfare funds and others, including Local 875.

Mr. Stolfi was employed by and associated with Local 875, holding at various times the positions of secretary-treasurer, trustee and administrator. He also was associated with the welfare fund, and participated directly and indirectly in the affairs of both the local and the fund.

Mr. Sasalino also was employed by and associated with Local 875, holding the position of business agent. As a result of that position, he was associated with the welfare fund and participated directly and indirectly in the affairs of it and the local.

According to the indictment, Messrs. Stolfi and Sasalino "would and did extort, receive and obtain money and other things of value from Wedtech for their benefit by agreeing to use their influence and control over Teamsters Local 875 and the Welfare Fund to provide labor peace at Wedtech's manufacturing plants."

In addition, the grand jury alleges the two exercised influence and control over collective bargaining negotiations between Local 875 and Wedtech in such a way as to ensure the agreements entered between them would contain terms favorable to Wedtech.

The indictment also said Mr. Stolfi "would and did obtain money by deceiving and defrauding the members of Teamsters Local 875, the Welfare Fund and the Great American Insurance Co. by filing false and fraudulent insurance claims." The indictment also alleged Mr. Stolfi embezzled money from the welfare fund through the receipt and concealment of kickbacks on purchases of dental equipment and supplies by the welfare fund.

# Diamond Star dazzles

## Leaseback deal is largest this year

By Marcia Parker

NORMAL, Ill. — The $500 million sale-leaseback of a newly opened Midwest auto manufacturing plant operated by Diamond Star Motors is the biggest non-utility leveraged lease of the year.

The sale-leaseback of the central Illinois plant, which will produce 240,000 cars a year when it hits peak production, was completed in June. The plant, which is gearing up to full production, will have its grand opening next month.

Diamond Star is a joint venture of Chrysler Corp. and Japan's Mitsubishi Motors Corp.

Morgan Guaranty Bank and Japan's Mitsubishi Bank served as co-financial advisers to Diamond Star in structuring and sourcing the 25-year lease.

For Diamond Star, the lease financing made sense because it was low-cost financing with myriad tax benefits that will be useful to the investors. Because Diamond Star is a new concern, it will not be able to use the tax benefits for some time, so it made sense to look into a sale-leaseback and pass those benefits to investors.

The financing was structured with an equity portion provided by Mitsubishi and Chrysler entities and two debt tranches with different credit structures.

The largest piece of the debt financing was provided by the Export-Import Bank of Japan, the first time that institution participated in the debt portion of a U.S. leveraged lease.

The debt obligations of Mitsubishi Motors, which isn't yet a household name in the U.S. market, were guaranteed through a letter of credit from Mitsubishi Bank.

The rest of the debt financing was supplied through a private placement with a host of insurance companies led by John Hancock Insurance Co. Other investors include Aetna Life & Casualty Co.

Because this is a joint venture, the lease was carefully structured to ensure that if certain changes occur in ownership positions, the lease financing package will remain in tact.

While the lease was cited by investment bankers as an interesting one, few copycat transactions are expected. The Diamond Star plant became part of the transition property designated by Congress under rules that accompanied the 1986 tax reform law, thus making it eligible for investment credits and accelerated depreciation.

Chrysler and Mitsubishi each hold 50% equity interests in Diamond Star Motors, which was incorporated in October 1985; the partnership between the automakers dates to 1970.

The plant involved in the sale-leaseback is about 2 million square feet and is situated on 636 acres on the west side of Normal. The first automobile to roll off the assembly line is a new front-wheel drive, two-door sports specialty car.

Later, the plant will begin producing a four-door, compact sedan. Half of the cars manufactured at the plant will be sold by Chrysler and half by Mitsubishi Motor Sales of America. ■

**Diamond Star Motors — a joint venture of Chrysler Corp. and Japan's Mitsubishi Motors Corp. — arranged a $500 million sale-leaseback of its auto manufacturing plant near Normal, Ill. The arrangement is the largest non-utility deal so far this year.**

PORTFOLIO MANAGEMENT

# Consultant sees many bears

## Research finds few opportunities

By Barry B. Burr

CHICAGO — Few asset categories currently appear attractive to Stratford Advisory Group Inc., according to the consulting firm that recommends asset allocation the old-fashioned way, based on fundamental research.

Of 28 institutional asset categories, Stratford recommends underweighting 18 (including developmental and leased real estate and foreign equities), overweighting only four (including cash and non-dollar bonds) and weighting neutral the other six (including timberland and both fixed-income and equity index funds).

Stratford's recommendations remain substantially unchanged from those of August 1987. Then the firm was optimistic about small-capitalization stocks, a group that was hit hard two months later in the stock market crash. In November, in a special post-crash report, it recommended clients underweight small-cap stocks, just as, it turned out, they began to recover.

Stratford, which doesn't manage money, issues asset allocation recommendations every six months to about half of its 25 retainer clients, including Knight-Ridder Inc. and Fairchild Industries Inc., whose assets total some $4 billion to $5 billion.

"When there are events like the October crash, then we will re-evaluate things," said David Kudish, president. Accordingly, last November Stratford issued a special allocation report.

The firm's allocation recommendations are based on research of broad economic, political and social trends.

"In the final analysis we apply common sense," said Mr. Kudish. After analyzing data and subjective analysis of trends, he said the group asks, "Does it make sense?"

He contrasts Stratford's analytical decision-making process with active asset allocation techniques, such as the now-popular tactical asset allocation. TAA makes shifts frequently, typically monthly, relying mainly on mechanistic signals, based on the relative performance among asset classes.

Stratford calls its recommendations strategic asset allocation. Decisions are the outgrowth of long-range studies of potentially major socioeconomic issues. Such long-range research often has little immediate investment implication, Mr. Kudish acknowledged. But he said it is invaluable in forcing Stratford to look for potential trends in the investment markets.

"One thing Stratford and David (Kudish) try to do is to get as many inputs as possible" in their evaluation of the markets, said William H. Buckland, who until May was director-business development at Fairchild Industries Inc., Chantilly, Va. As such, he oversaw its treasury department and was a member of its pension committee.

"So they are not regurgitating information already on the Street," added Mr. Buckland, who now is chairman of Metro Credit Corp., McLean, Va. "They are widely read and talk to a number of different people. They have a good sense of history to put the market in perspective."

Mr. Buckland said he appreciates Stratford's "willingness to go out on a limb and give very specific recommendations."

Five of the firm's six professionals contribute to research studies. Stratford now is preparing a study of the Latin American debt problem.

*Continued on page 15*

FEATURE

# Retirees and health

## Voluntary plan can be funding answer

By Harvey Kesselman and Bruce Zimmerman

Much has been written about the lack of an appropriate tax-advantaged vehicle for prefunding retiree medical benefits. Options, such as 501(c)(9) trusts, 401(h) accounts and corporate-owned life insurance arrangements, have been suggested and often rejected because of their limited ability to provide a tax-free buildup of assets. A solution is to fund these benefits through a qualified defined benefit pension plan.

This funding can be accomplished by the plan sponsor replacing the current employer-paid medical plan with a voluntary retiree medical plan. The plan would would be funded through contributions made by the employee.

At the same time, the company would increase the benefit under its defined benefit plan to provide the retiree with sufficient money to pay the voluntary premium.

Thus, the benefit would be funded through the defined benefit plan and would begin when an employee retires and has attained a specific age or number of years of service. Additionally, the benefit would be structured to be reduced when the retiree becomes eligible for Medicare, much like a level income option in a pension plan integrates with Social Security.

Because the amount will be coming from a defined benefit plan, it will be taxable to retirees when they receive their monthly benefits.

Thus, the retiree will be contributing after-tax dollars to the medical plan.

Among the advantages of this program are:

- the ability to pre-fund on a tax-deductible basis;
- the tax-free accumulation of investment earnings;
- the use of excess pension assets to help fund and expense retiree medical benefits;
- a possible continuing reduction of expense if investment earnings offset costs, which has been the case historically in pension funding;
- a cap on costs of post-retiree medical benefits;
- flexibility for employees to use the additional benefits as they see fit;
- investment and administration of medical benefit funding through the pension plan; and
- use of the Pension Benefit Guaranty Corp. insurance program to protect these benefits.

The disadvantages are:

- a greater level of vested benefits for employees who leave employment prior to the age at which they otherwise would be entitled to retiree medical benefits;
- a tax to the retiree on the benefit payments used to fund the voluntary medical benefit plan;
- cash needed to pre-fund the benefits;
- use of the extra benefits by employees for other than medical coverage; and
- a possible adverse impact on PBGC premiums and level of liabilities.

These additional benefits would be paid to the employees directly from the defined benefit plan. The plan, accordingly, would have to adhere to requirements of the Employee Retirement Income Security Act and the Omnibus Budge Reconciliation Act — and would be permitted a tax deduction for the contributions to fund the appropriate benefit levels.

Furthermore, all earnings would accumulate on a tax-free basis until actually paid out.

Any surpluses now in the plan would be used to cover the additional liabilities attributable to the newly established benefit. To the extent the surplus, or surplus cushion (essentially 150% of accrued liabilities) is not eliminated, no tax deductible contribution could be made to the plan. After any surplus is used, contributions would become deductible.

The long-term cost of the program would decrease as the fund accumulates investment earnings on a tax-free basis. Also, the sponsor could completely fund effects of future medical trends without having to be concerned with the limits imposed by a 501(c)(9) trust.

Because of previous commitments, employers possibly could establish the voluntary plan for only new employees. Depending on legal precedent, corporations might have to continue to pay all retiree medical benefits under their current arrangements for retirees and current employees, making it unlikely they also could be included in a voluntary scheme.

Many plan sponsors have been seeking a way to use excess assets in their pension funds. Now, a sponsor can take the excess funding out only by terminating the defined benefit plan, subject to being taxed on the reversion at the sponsor's normal corporate tax rates, in addition to paying an excise tax of 10% of the reversion.

By implementing this program, these funds can be used without terminating the plan or facing other adverse tax consequences. Additionally, the excess assets can:

- be used to fund retiree medical benefits;
- continue to accumulate tax-free until needed;
- no longer be used against the sponsor to help finance a hostile takeover;
- continue to be managed and invested in the pension fund; and
- cushion against the risk of future balance sheet liabilities.

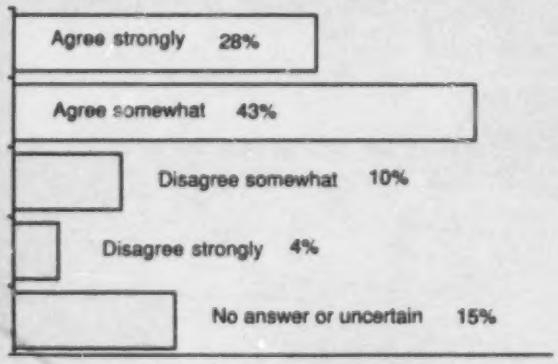
The Financial Accounting Standards Board expects to issue an exposure draft by year end requiring liability and expense be shown on an accrual basis for retiree medical benefits. Now, cor-

*Continued on page 15*

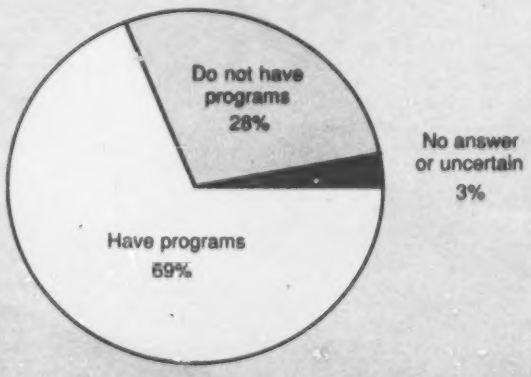
**Bruce Zimmerman, left, is consulting actuary and Harvey Kesselman is vice president at Miller, Mason & Dickenson Inc., Conshohocken, Pa.**

**This is the first of two articles. The second, to be published Oct. 17, will explore more specific issues in paying retiree medical-care benefits through a defined benefit pension fund.**

**Do you favor use of pension surpluses to fund retiree health-care benefits?**




**Corporate practices on paying retiree health-care benefits**




Source: Greenwich Associates, Greenwich, Conn., survey of 1,003 companies

# Many bears

*Continued from page 14*

Almost two years ago the firm studied the implications of acquired immune deficiency syndrome, specifically noting the potential impact on insurance companies, the health-care system and employment practices.

Such reports, Mr. Kudish noted, don't necessarily produce an immediate call to shift into or out of an asset class. But they raise issues the firm will continue to analyze.

In its latest recommendation, grouped in five categories, Stratford views as:

- Very attractive: no asset classes;
- Attractive: Cash, non-dollar bonds, high-yield large-capitalization stocks and convertibles;
- Neutral: Large-cap growth stocks, equity index funds, bond index funds, intermediate high-quality non-callable bonds, immunized bond portfolios and timberland;
- Unattractive: Contrary value-oriented stocks, small-cap growth stocks, high-tech stocks, European equities, Pacific rim (excluding Japan) equities, venture capital, long-term high-quality non-callable bonds, intermediate-term zero-coupon bonds, existing real estate, farmland, oil royalties and precious metals; and
- Very unattractive: Japanese equities, developmental real estate, leveraged buy-outs, junk bonds, risk arbitrage and long-term zero-coupon bonds.

Explaining some of the recommended allocations, Mr. Kudish said cash, although now rated as "attractive," probably would never appear "very attractive" because of its potentially limited earning power, compared with stocks or bonds, which can return 30% or more in a year.

Stratford ranks non-dollar bonds as attractive because of the firm's pessimism on the trade and budget deficits. Those deficits, he said, mean the Federal Reserve Board "has to try to maintain interest rates at a higher spread than those in Japan, the U.K. or Germany to keep the market attractive to investors."

The firm recommends underweighting small stocks, even though "we think the relative valuation is there," he said. "We're concerned about who's buying — mutual funds, pension funds or individuals."

Although pension funds appear to be buying more small-cap stocks, he said individuals, whether on their own or through mutual funds, aren't and "have pretty much left the market."

Without individuals, he said he didn't think institutional investors, namely pension funds, alone could stem the growing pressure on small-cap prices.

"Because of the thinness (in trading) of the over-the-counter market since the crash, we want to be a little late rather than early" in moving heavily into small-cap stocks, he added. "You have time before you are compelled to buy," about six months to a year.

"I think if the market gets kicked one more time, small caps will get kicked worse," he added. "At that time, we would be interested in buying."

The prospect of 1992, when trade and other economic barriers will fall within the European Community, doesn't make Mr. Kudish sanguine. The situation reminds him of last year's Big Bang in London, when securities market regulation was eased. "Every investment banking firm licked their chops; they couldn't wait to get in," he said. "Within six months many of these guys lost their shirts."

In 1992, he said the new competition will promote economic Darwinism, making it possible many firms will be unable to survive. ■

# Retiree

*Continued from page 14*

porations footnote only their annual cash outlay.

The accrual of the expense and liability and the associated financial statement impact most likely will be determined in a manner similar to FASB 87, the pension accounting rule. This suggests any additional accruing liability incurred through the increasing of benefits under the defined benefit plan would be incurred anyway.

Because the FASB requirements for accruing retiree medical liability will not become effective until 1992, however, by adopting this program now, recognition of these liabilities will occur at a much earlier date. On the flip side, the long-term accrued liability would be lower because of the buildup of earnings through the pension plan. Under FASB 87, as well as the expected rules for accruing liability of retiree medical plans, the largest offset to expense comes from the expected earnings of the assets. The tax-free buildup of the assets will reduce significantly the long-term accrued liability and financial statement impacts for these benefits.

By making the current retiree medical plan voluntary and employee-paid, there no longer would be an expense item for the plan. The accrued medical liability would be shared under the defined benefit plan and could be lower than the currently defined retiree medical plan expense because liabilities could be limited.

Because the benefit would be defined, it would not necessarily need to be the full amount of the medical plan premium. This amount could be less than or equal to what was needed under the retiree medical plan.

The new FASB rule is expected to require the recognition of a liability, most likely the unfunded accrued liability on the balance sheet for retiree medical benefits. The buildup of assets in the defined benefit plan and current surplus assets can reduce significantly the net liability the company must report. ■

# Candidates

*Continued from page 2*
organization.

The candidates' views were contained in written responses to questions posed by the United Shareholders Association, a shareholder rights group founded by Texas oilman T. Boone Pickens.

Mr. Bush said he supports measures to require a shareholder vote on adoption of poison pills and lucrative "golden parachute" management severance contracts.

Mr. Bush also said the payment of "greenmail" by corporate managers to repel offers to shareholders is "particularly worrisome." Mr. Bush's statement is the first of his campaign on the issues of shareholder rights and the market for corporate control.

Legislation to require shareholder approval of poison pills and golden parachutes, institution of a confidential ballot in corporate elections, banning greenmail payments, reforming the corporate proxy system and mandating a one-share/one-vote guarantee for publicly traded stock is gaining support in Congress.

In June, corporate management interests withdrew their support for a tender offer bill on the Senate floor after a strong show of support for a series of shareholder rights amendments. Action on the bill was suspended, but the issues are likely to be addressed again in the next Congress.

Mr. Bush said he is skeptical of assertions by corporate managers that defensive tactics, such as poison pills and greenmail, are needed to maintain long-term development objectives.

Noting a company's stock price is a reflection of publicly available information, he added: "Sometimes it seems that managers use these tactics to save themselves from the competitive pressures of the market for corporate control, not to protect the interests of the shareholders. Greenmail is particularly worrisome — it strikes me that when managers pay greenmail, they might be violating their duties to the stockholders."

At the same time, however, the vice president said he was hesitant to "criticize some of these devices too strongly." He indicated certain defensive tactics might be appropriate where a company's stock price does not reflect still-secret research.

Mr. Bush said he is reluctant to have Congress enact legislation that would overrule the growing role of the states in regulating corporate takeovers.

"There is much to be said for encouraging states to compete to determine which regulations are best for shareholders — and lower the costs for corporations to raise capital," he said.

"Many of these laws are very new. It is not clear yet how they affect hostile tender offers in practice," he said. While they may appear to "unduly burden interstate commerce," Mr. Bush said, "a target company's management must consider other factors. Remember, if managers arbitrarily refuse an offer, they may be breaching a fiduciary duty to shareholders."

He said he would "ask the Securities and Exchange Commission to propose new legislation if these state laws do, in practice, restrict the interstate securities markets."

During the campaign, Mr. Dukakis has said "mergermania" is "tearing companies apart."

He has been an active ally of corporate America, helping companies in his home state fend off unwanted suitors. When Revlon Group made a hostile bid for Boston-based Gillette Co., Mr. Dukakis played a key role in getting the state Legislature to enact an anti-takeover law. When Campeau Corp. pursued Federated Department Stores, a chain that includes a leading Boston store, he asked the Federal Trade Commission to review the acquisition.

Mr. Dukakis also has said corporate takeovers are part of the business of doing business, but corporate managers should understand their jobs do not come with a lifetime guarantee.

Mr. Dukakis has said he supports stronger enforcement of existing anti-trust laws, an increase in the SEC budget, a Senate bill to force raiders to make their efforts more public and that he would like to see a reduction of the 10-day period in which a company can acquire a block of another company's stock without disclosing whether it intends to attempt a takeover.

He said he opposes greenmail and using pension fund surpluses to repay debts incurred in takeover financing. ■

# Partners sue

*Continued from page 2*
Founded in 1984 to market a quantitative equity strategy to pension sponsors, Brignoli, Curley & Roberts' assets under management have grown to some $826 million from 16 tax-exempt clients as of Jan. 1. Among its pension sponsor clients, as of the beginning of the year, are Eastman Kodak Co. and Westinghouse Electric Corp.

None of the three suits makes any allegations concerning client accounts. The same law firm, Reavis & McGrath of New York, is representing the plaintiffs in each of the suits. Arie E. David of New York, who has his own law firm, represents Mr. Brignoli.

Mr. David and Glen Banks, a Reavis & McGrath attorney, confirmed the suits. Both said action is pending in all three.

"The real issue is credibility with clients," said Ann Nichter, attorney and partner in Mr. David's firm. "And Mr. Brignoli has retained credibility with clients."

"I think what you've got is some people (the suing partners) who are a little envious," she added. "Now they're out on a street corner doing nothing."

The three retain their interests as limited partners in Brignoli, Curley & Roberts. According to their suit, Mr. Curley owns 22.38%; Mr. Karanfilian, 9.1%; and Mr. Roberts, 4.55%.

Brignoli & Curley Inc. is the sole general partner of Brignoli, Curley & Roberts and as such manages the firm.

Mr. Brignoli owns 50.1% of Brignoli & Curley and is its president and chief executive officer. Mr. Curley owns 49.9%.

"(Mr.) Brignoli makes the day-to-day business decisions for both BCI and BCR," according to the suit by the three partners.

Brignoli Models Inc. holds 53.97% of Brignoli, Curley & Roberts, according to the suit. Mr. Brignoli is a principal of Brignoli Models, a firm in which the suing partners have no involvement.

Brignoli, Curley & Roberts' revenue last year totaled $1.9 million, according to the suit. That revenue amounts to an average of 23 basis points, based on the firm's latest asset figures.

Mr. Curley, whose title was chief investment officer, oversaw trading for Brignoli, Curley & Roberts, which he left last January. From its founding until last November, Mr. Curley also served as Brignoli & Curley's president and chief executive office; Mr. Brignoli since has assumed both positions. Mr. Karanfilian left Brignoli, Curley & Roberts in December.

The firm follows an investment strategy developed and licensed by Brignoli Models.

According to their suit, the "plaintiffs have instituted this action to redress breaches of fiduciary duty by the corporate general partner, BCI, which have benefited its principal, (Mr.) Brignoli, at the expense of the partnership."

Brignoli

The plaintiffs seek the removal of the corporate general partner, which is controlled by Mr. Brignoli, or, dissolution of Brignoli, Curley & Roberts. In addition, they seek to recover unspecified financial claims and costs.

"Plaintiffs, on behalf of BCR, also seek damages for such breaches of fiduciary duty and an accounting with respect to BCR," the suit continued.

The suit states that "by June 1988, it had come to the attention of plaintiffs that (Mr.) Brignoli was abusing his position as the person controlling the corporate general partner (BCI) to benefit himself."

The suit goes on to state Mr. Brignoli refused a "demand," made June 15, to permit the plaintiffs to exercise their right as limited partners to inspect the books and records of Brignoli, Curley & Roberts.

"Since November 1987, the general partner, BCI, and the person who controlled it, (Mr.) Brignoli, continually have rebuffed attempts by plaintiff limited partners to obtain information concerning the finances of the partnership," according to the suit.

Also, the lawsuit stated that in the first half of 1988, Mr. Brignoli caused the firm to pay approximately $250,000 to Brignoli Models for trading audit services and another $175,000 for trading cost analyses.

"There was no need for BCR to pay $425,000 to Brignoli Models for such purported consulting services because numerous other companies that were not affiliated with (Mr.) Brignoli were capable of providing such services at a lower cost," the lawsuit stated.

"However, no bids were solicited."

# Schools seeking

*Continued from page 1*
The Common Fund.

Few endowments now invest in leveraged buy-outs, largely because the amount they want to commit — from about $150,000 for small colleges to $10 million for large — could not provide them broad diversification in the asset class, said Mr. Keane.

The Common Fund helped set up Endowment Advisers of Fairfield in January to facilitate endowment investments in private markets. The name of the limited partnership is Endowment Partners 1.

Endowment Advisers established the new limited partnership to invest in seven leveraged buy-out funds that invest in a wide range of buy-outs, including Merrill Lynch Capital Partners, New York; Clayton & Dubilier, New York; and McCown de Leeuw & Co., San Francisco.

Believed to be the first program of its kind, the manager-of-managers setup will allow even small endowments broad diversification across leveraged buy-out investments. The partnership's first fund will total $125 million.

"They (endowments) want diversification away from the public securities market. Private market investments require a longer-term commitment and have a different pattern of price behavior than stocks and potentially much higher returns," Mr. Keane said. For instance, funds managed by the seven firms in the past have had annualized returns ranging from 74% to 160%.

"Prices paid today to acquire companies are somewhat higher, which will reduce the returns looking forward," Mr. Keane said. He still expects Endowment Partners 1 to earn 40% per year, however, because of their focus on smaller companies.

Forty-five institutions have expressed an interest in Endowment Partners 1, which is scheduled to close Oct. 15 and can only accept 99 participants. The second and final closing will be Dec. 31.

In addition to Mr. Keane, trustees of Endowment Advisers Inc. include Rodney H. Adams, Stanford University; William T. Spitz, Vanderbilt University; David K. Storrs, The Common Fund; David F. Swensen, Yale University; and John L. Temple, Emory University.

All the endowments of the trustees' universities are expected to participate in the fund, he said.

"For various types of private investment programs, 5% or a little more is certainly reasonable for endowments," Mr. Keane said.

"I think this will be the first in a series of private investment programs for endowments. We're already thinking about starting a venture capital investment pool in the first quarter of 1989 and an oil and gas investment program for 1989," said Mr. Keane.

The Common Fund, which has an endowment totaling $3.5 billion, invests mainly in publicly traded securities. It also has short-term investments totaling $7.5 billion.

They chose seven leveraged buy-out funds to make pure equity investments and one fund to make debt with equity investments. Assuming $100 million will be raised for the first fund, equity managers appointed will receive allocations of $7 million to $13 million each. Merrill Lynch Capital Partners (Capital Appreciation Fund II) and Clayton & Dubilier (Private Equity Fund IV), each will receive 13%. Gibbons, Green van Amerongen (Fulcrum IV) and Morgan, Lewis, Githens and Ahn, (MLGA Fund L.P.) will be allocated 10% each. Brentwood Associates (Brentwood Associates Buyout Fund), McCown de Leeuw (McCown de Leeuw & Co. II, L.P.) and Neuberger & Berman (NLF Partners), each will receive 7%.

Private placement debt securities will comprise one-third of partnership assets and will provide approximately 12% current yield, plus equity participation. The cash flow is important to most endowments.

The manager of the debt portion is Trust Co. of the West (TCW Special Placement Fund III).

The fund will invest mainly in small to midsized companies. "We think continuing opportunities are more likely to be in smaller and midsize companies. Megadeals are getting scarcer and scarcer. Also a lot of competitive bidding on those megadeals drives prices up and returns down. Smaller deals are negotiated usually — not put out to bid," Mr. Keane said.

All transactions will be friendly, with a long-term growth orientation. The goal is to improve operations and boost profitability, not to engage in "bust up" deals involving large asset sales.

Future leveraged buy-out funds probably will feature a different cast of managers, Mr. Keane said. The partnership looked at 30 different firms before selecting.

For Endowment Partners 1, Fairfield Advisers, Fairfield, Conn., will act as managing general partner; Amherst Capital Financing, Springfield, Mass., will be general partner. Both will be passive investors. Colleges, universities and independent schools will invest as limited partners.

The fund will have a 10-year term with periodic distributions of all income and sale proceeds.

Endowment Advisers' first private markets program was in commercial real estate. The program's first closing was in July, when it raised $250 million from 60 colleges. In the second closing slated for the end of October, Mr. Keane expects to raise another $200 million from about 80 colleges. By year end, the program should have raised $500 million to $600 million, "which is quite significant," he said. Six managers run the real estate assets. ■

# International takes off

*Continued from page 3*
million balanced account. The sole assignment put First Investment among the leaders in assets placed.

The sheer size of the California employees' allocation overshadowed other money managers, and styles, which found success in the third quarter.

Copley Real Estate Advisors, Boston, landed five new accounts totaling $68.5 million.

Invexco Inc., Houston, nabbed four clients in its oil and gas exploration endeavor, three of whom enumerated for *P&I Age* $94 million in new investments.

The Common Fund, Fairfield, Conn., also landed four new accounts for the quarter, receiving $25 million for real estate investment trusts, $2.5 million for a South Africa-free bond portfolio and $3 million for a fixed-income account.

Real estate should continue to be an area of strong attraction, with most new investors seeing it as a diversification play and investing directly rather than through pooled accounts, BARRA's Mr. Baker said. ■

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PENSIONS & October 17, 1988

# InvestmentAge

The newspaper of corporate and institutional investing $5 an issue - $110 a year

# Incentive fees burgeon

## Goodyear targets equity managers

By Barry B. Burr

AKRON, Ohio — The Goodyear Tire & Rubber Co. pension fund wants to put all of its equity managers on performance-based fees by the end of the year, according to corporate executives.

The company's program is the latest by a pension fund as interest among plan sponsors in such fee arrangements appears to be growing.

The $3.2 billion Shell Oil Co. pension trust has hired its first international manager on a performance-based fee schedule and plans to adopt such schedules for almost all of its asset classes, said Leonard S. Chaikind, administrator-Shell Pension Trust/Provident Fund (*See related story*).

The $2.73 billion Xerox Corp. pension fund also is considering performance-based fees, said Jainel Buell, manager-trust investments. She declined to discuss details.

Executives at Wilshire Associates, Santa Monica, Calif., a major advocate of performance-based fees, also see increasing interest, according to Stephen L. Nesbitt, vice president. One-third of the firm's 60 tax-exempt clients use performance-based fees for some portion of their assets, he said.

Wilshire is assisting Goodyear in devising its new fee arrangement.

Goodyear will use the Standard & Poor's 500 stock index as a performance benchmark, rather than designing customized benchmarks for each manager's investment style, said Duane H. Smith, manager-benefits controls and investments.

The amount affected by Good-year's move is unclear. The pending termination of a salaried plan would reduce Goodyear's total pension assets to $641 million from the $1.57 billion, reported at the beginning of the year, based on a company filing with the Pension Benefit Guaranty Corp. But Mr. Smith said Goodyear would have some $900 million in assets remaining after the termination. He declined to elaborate.

With 55% of the fund allocated to equities as of

*Continued on page 59*

**Fund administrators at Goodyear Tire & Rubber Co. want to implement a performance-based fee schedule for all equity managers . . .**

**. . . while Shell Oil is looking at plans to adopt performance-based fees for all asset classes, including its new international manager.**

## Shell plan opens with international

By Marlene Givant Star

HOUSTON — The $3.2 billion Shell Oil Co. pension trust is embarking on its first formal international investment program, and also plans to adopt performance-based fees for almost all of its asset classes, according to Leonard S. Chaikind, administrator-Shell Pension Trust/Provident Fund.

The Provident Fund is a combination of savings programs totaling $3.4 billion.

Shell, although late to enter the international arena, is a pioneer in many ways. Besides planning performance-based fees for its international managers — one of a very few plans to do so — Shell eventually will manage the cash portion of its international portfolio in-house, as it does for domestic investments.

In addition, Shell has started lending global securities through its new global custodian, Boston Safe Deposit & Trust Co., Boston (*See related story*).

Shell also is the first U.S. pension fund to hire AIG Global Investors Inc., New York; the 2-year-old firm received $50 million for international equities. Frank Russell Co., Tacoma, Wash., assisted in the search.

The firm was funded in one fell swoop through a program trade by Shell and future international managers will be funded in the same manner. Assets came from reductions in three domestic equity accounts Mr. Chaikind would not identify, leaving Shell's overall equity allocation unchanged.

The current asset mix is 52.2% domestic stocks; 1.6% international stocks; 13% real estate; 32.9% bonds; and 0.3% cash. By the end of next year, the fund expects to have an international stock allocation of between 5% and 10%. In 1990, fund officials plan to boost that equity exposure and diversify into foreign bonds.

On the performance-fee front, Shell has placed three equity managers under a fulcrum fee structure in which the firms will get a percentage reward over their minimum fee for adding value over their benchmarks.

*Continued on page 58*

# Global lending gathering speed

By Marlene Givant Star

Global securities lending activity has mushroomed in the past year with at least 21 U.S. tax-exempt funds lending Japanese stocks.

That compares with four funds a year ago.

The business is enormously profitable because demand for the securities far exceeds supply. Funds are attracted to securities lending globally because the spreads can be up to six times the spreads on domestic loans, exceeding 300 basis points. Funds use the gains to offset the high costs of investing overseas.

Funds participating in global securities lending now include American Information Technologies Corp., Chicago; the Illinois Municipal Retirement Fund, Chicago; Shell Oil Co., Houston; and such global lending pioneers as the College Retirement Equities Fund, New York; The Common Fund, Fairfield, Conn.; the Harvard University endowment, Boston; and the San Francisco City and County Employees' Retirement System.

At least five global custody banks, including Bankers Trust Co., New York; Boston Safe Deposit & Trust Co., Boston; Chase Manhattan Bank, New York; Northern Trust Co., Chicago; and Harris Trust, Chicago; offer the service.

Chase, the second-largest global custodian, just started lending Japanese equities in September. Officials at State Street Bank and Trust Co., Boston, the largest global custodian, would not return phone calls.

Many banks are working to introduce countries besides Japan, where demand is hottest now. Boston Safe plans to begin lending Hong Kong stocks in two weeks and British stocks in a month. In 1989, it will work on its own foreign bond lending program and might begin lending French securities. "As Sherman

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## LATE NEWS

### Reversion-tax debate under way

WASHINGTON — House and Senate conferees were meeting last week to decide the fate of a Senate amendment that would sharply raise the federal excise tax on asset reversions from terminated overfunded pension plans.

Under the amendment, included in a technical corrections bill approved last week by the Senate, a 60% excise tax would be applied on reversions received from July 26, 1988, to May 1, 1989. After May 1, the excise tax would drop to the 10% rate that now applies on most reversions.

### Pension plan assets increase 4%

WASHINGTON — The assets of private non-insured pension plans grew 4% during the second quarter to $1.23 trillion at the end of June, the Employee Benefit Research Institute reports.

This places the assets of such plans still below their peak of $1.3 trillion at the end of the third quarter of 1987.

During the quarter, net withdrawals of $9 billion from equity portfolios, $3 billion from bond portfolios and $1 billion from other assets were offset by net cash contributions of $6 billion and total investment earnings of $50 billion.

### Alameda County hires executive

OAKLAND, Calif. — The $700 million Alameda County Employees' Retirement Association, Oakland, has hired Francis John Early as its retirement administrator beginning Nov. 1.

Mr. Early comes to Alameda from Dorn & Helliesen Inc., Corte Madera, Calif., which has been Alameda's asset allocation consultant, according to Helen Wright, deputy administrator.

He replaces Dave Tobias, who retired March 31.

### Copley pool raises $535.5 million

BOSTON — Copley Real Estate Advisors closed its Copley Institutional Investors Fund II recently after raising $535.5 million from 28 investors, according to Jack Phillips, a Copley managing director.

CIIF II is a closed-end blind pool that will be invested in joint venture real estate development deals nationwide; $25 million already has been put into undeveloped land in a Trammell Crow industrial park in Industry, Calif.

Among the 28 investors were the State of Connecticut Trust Funds; Illinois Power Co.; the Police & Fireman's Disability & Pension Fund of Ohio; Phelps Dodge Corp.; the Philadelphia Municipal Pension Fund; Rockefeller Foundation; the Alfred E. Sloan Foundation; Stanford University; and Wellesley College.

### Funds select managers, trustee

• MINNEAPOLIS — E F. Johnson Co., Minneapolis, has hired IDS Trust, Minneapolis, to manage its $20 million thrift/profit-sharing plan, said Ernest Glass, Johnson's chief financial officer.

Mr. Glass said IDS replaces Equitable Life Assurance Society of the United States, New York, for guaranteed investment contracts; Kemper Asset Management Co., Chicago, for equities; and Norwest Bank Minneapolis, as trustee. IDS will manage a common stock fund and a combined money market/GIC fund, and do the bookkeeping.

• KEWASKUM, Wis. — Regal Ware Inc. has selected a $1.4 million bank investment contract from Washington Mutual Savings Bank, Seattle, for a portion of its $25 million employee savings plan, said James G. Moran, plan administrator.

• KALAMAZOO, Mich. — The $730 million Upjohn Co. pension fund hired J.P. Morgan Investment Management Inc., New York, to manage an undisclosed amount in its open-end Real Estate Fund, said G. Jake Miller, trust investments manager.

Upjohn also increased its commitment to the open-end Prime Property Fund run by Equitable Real Estate Investment Management Inc., New York, he said. He would not disclose the amount of this commitment but said it and the J.P. Morgan hiring raise Upjohn's real estate allocation to 5% from 2%.

• FORT WAYNE, Ind. — Essex Group Inc. hired Northern Trust Co., Chicago, as master trustee for its $25 million pension fund, said David Owen, director of treasury services.

Essex Group and its pension fund recently were spun off from United Technologies Corp., Hartford, Conn., in a management-led leveraged buy-out. Northern Trust will be responsible for short-term investments, Mr. Owen said.

### Accountant acquires consultant

NEW YORK — Arthur Andersen & Co. has acquired GA/Partners, a Washington-based real estate consulting firm, in what the company called a reorganization of its real estate accounting practice.

GA/Partners, the successor firm to Gladstone Associates, will continue doing business as GA/Partners with 60 professionals.

## DEPARTMENTS


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Vol. 16, No. 22 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. Copyright 1988.

# Realty deal of Heitman, Wisconsin off

By Steve Hemmerick

The $16 billion State of Wisconsin Investment Board, Madison, and Heitman Advisory Corp., Chicago, have parted company 10 months after signing a contract under which Heitman would have invested several hundred million dollars of Wisconsin's pension fund assets in real estate.

Heitman and Wisconsin officials claim to have fired each other first. Sources said Heitman officials claimed the firing was to protect their standards of fiduciary responsibility, while officials for the Wisconsin board said Heitman wasn't finding good property investments.

The afternoon of Oct. 11, Norman Perlmutter, chairman, and David M. Glickman, president, of Heitman, announced they were terminating Wisconsin's account.

Heitman officials said their board of directors had spent more than a month discussing terminating the Wisconsin account but formally decided Oct. 11. Wisconsin received written notice of the decision Oct. 12.

Wisconsin officials said that was one day before they had planned to visit Heitman's Chicago offices and terminate the relationship.

"This is the first active relationship that we have withdrawn from," Mr. Glickman said. "Heitman does perceive itself as a fiduciary and does have an obligation to invest for the beneficiaries for whom we invest," he said. Heitman has more than 50 tax-exempt clients and manages more than $4 billion in tax-exempt assets.

"Frankly, we consider ourselves to be fiduciaries in the highest sense and, in the last analysis, we are responsible for the investments of funds for millions of beneficiaries, and when we perceive that we may be asked to lower our standards we quit. And it may not be easy, but sometimes, you have got to do the hard thing. It was a plum account, but sometimes you have got to do the hard thing," said Mr. Perlmutter.

He would not discuss what the "lower" standards entailed.

Sources said Heitman considered Wisconsin a top account; 14 real estate money managers had competed for four contracts as separate account managers for the fund.

In response to Heitman's announcement, Marshall Burkes, executive director of the Wisconsin fund, said, "Paul Fanfera, our investment director, concluded that because of a lack of performance in both quality and quantity of deals shown us, that we should terminate the contract with Heitman.

Norman Perlmutter said Heitman Advisory has ended its account with Wisconsin.

"The (Wisconsin) board concurred (with the recommendation) . . . Oct. 6, and Paul and I volunteered to give full explanation to senior officers of Heitman this Thursday (Oct. 13) in Chicago.

"We have not accepted a single deal of theirs, and we have not paid them any money," said Mr. Burkes, who added Heitman had presented two deals to the fund.

He said he was "appalled" at the announcement by Heitman officials, and said it "raises major questions about their behavior." Mr. Burkes limited his comments because board officials had not

*Continued on page 61*

# NCCMA director out

## Green ousted by board over philosophy

By Fred Williams

NEWTOWN, Conn. — The board of directors of the National Corporate Cash Management Association forced Lawrence K. Green to resign as executive director after serving only nine months.

The action — on the eve of the organization's annual conference — was prompted by what board members describe as major differences in philosophy and personality conflicts between Mr. Green and committee chairmen and officers.

According to several NCCMA board members, Mr. Green resigned after a late September meeting with the board in Denver.

Contacted at his home in Salisbury, Md., Mr. Green said he is considering legal action in response to the board's asking him to step down and said if circumstances warranted he would like to return to his post as executive director.

Several NCCMA board members referred all questions about the situation to Paul Even, the organization's president and treasurer of National Gypsum Co., Dallas.

L. Green

Marsha Prentiss, manager of treasury operations at Avantek Inc., Santa Clara, Calif., who is an NCCMA board member and volunteer conference coordinator, said board members "have been requested to simply say he (Mr. Green) is no longer with the association. I'm not permitted to discuss it."

Mr. Even declined to discuss the circumstances surrounding Mr. Green's departure. He said a search committee is being formed to find a replacement and the post probably won't be filled until early next year.

But several other board members, who asked not to be identified, said Mr. Green was asked to leave because of repeated conflicts over management of the association and personality clashes with volunteer committee chairmen and elected officers.

"He wanted to take the association in one direction and the volunteer cash managers wanted to go another. It was a difference of philosophy," said one board member.

Another member said Mr. Green "irritated a lot of people" and "saw the world differently" than association officers. "There was a difference in philosophy on how to run the association," the board member said.

One board member who was at the September meeting said the differences "run deeper than personality conflicts. It was literally

*Continued on page 58*

# Broker-consultants gain niche

By Joel Chernoff

Investment management consulting to small institutions and wealthy individuals is providing as much as $600 million in revenues to brokerage firms hurting from the 1987 market crash.

Shearson Lehman Hutton, which has about half of the existing market share, has experienced "a 35% rate of growth in terms of accounts and assets in the last five years," said Len Reinhart, director of the firm's investment advisory program in Wilmington, Del.

Broker-consultants — securities-firm units set up to advise clients primarily on asset allocation, manager selection and performance measurement — represent a significant area of growth for beleaguered securities firms, whose revenues have been trimmed in the aftermath of last year's stock market crash and which might face another round of layoffs shortly.

If anything, however, the crash has boosted the broker-consultants' market, as wealthy individuals increasingly seek professional advice on asset allocation and proper diversification.

Some money managers, including Dreman Value Management Inc. and Oppenheimer Capital Corp., both of New York, aware of the declining source of new dollars going into larger retirement funds, have turned to broker-consultants as a source of revenue.

Roughly $700 million of the $1.2 billion under management by

*Continued on page 61*

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# Merrill Lynch is top underwriter

By Marcia Parker

NEW YORK — Merrill Lynch Capital Markets swept the first three quarters of 1988 underwriting rankings, clinching the No. 1 spot for domestic underwritings, including initial public offerings and common and preferred stock offerings.

During the first three quarters of the year, Merrill was lead underwriter for $29.1 billion worth of domestic debt and equity securities, up from $27.8 billion during the same nine-month period last year. Last year, Merrill was ranked third in cumulative domestic underwritings, according to IDD Information Services, Inc., New York.

Merrill took 14.1% of the total domestic underwriting business in the three quarters compared with 12.1% in the 1987 period.

Merrill Lynch also kept the No. 1 spot in the third quarter in both initial public offerings and total equity offerings. The investment bank had the same top spots in the first half of the year.

Grant Kvalheim, head of capital markets at Merrill Lynch, attributed his firm's strong performance to a "continuum of the momentum we've built up over the year. We have committed capital to the business and raised our profile with issuers."

Goldman, Sachs & Co. took second-place honors, underwriting $28.5 billion of domestic securities for the three quarters. Last year, Goldman was ranked fifth and was credited with underwriting $24.1 billion of securities. Goldman had a 13.8% slice of the market for the first three quarters of 1988 compared with 10.5% last year, according to IDD.

Salomon Brothers Inc., which was the top-ranked domestic issues underwriter for the cumulative 1987 period, has slipped to third place. Salomon served as underwriter of $26.2 billion of domestic securities, taking 12.7% of the market; down from $34 billion and 14.8% of the market in 1987.

First Boston also dropped two notches since last year to fourth place. The firm underwrote $23.9 billion of domestic securities, or 11.6% of the market. Shearson Lehman Hutton moved up one place, taking fifth place with $19.2 billion, or 9.3% of the market.

The filter-down effect of Black Monday is still being felt in the global markets. Investors and issuers still are worried about unsteady worldwide economic growth, interest and exchange rates, and unsolved problems such as the U.S. budget deficit and Third World debt. Across the

*Continued on page 62*

## CORRECTIONS & CLARIFICATIONS

• **Dennis J. Lenahan** of Realty Capital Markets Inc. was misquoted in the Sept. 19 real estate supplement, PROPERTY. Mr. Lenahan, who was speaking at a Northwest Center seminar, made the observation that vacancies were at an all-time high, but cap rates were at an all-time low. He went on to state, "The presence of so much equity capital has held the cap rates low, but tenant demand is independent of the availability of capital."

• In the Oct. 3 issue, the Department of Labor's position on **short sales** by pension fund investors was incorrect on two points.

Short sales are not per se imprudent under the department's current interpretation. The original story had said short sales are not prohibited, which according to a Labor Department official is misleading.

Also, one of the three conditions a plan sponsor must meet in order to get relief from Section 406(a)(1)(B) of ERISA under the 1975 prohibited transaction exemption was misstated. The condition the broker must receive no interest or other compensation for extending credit applies only if that broker is a fiduciary of the plan.

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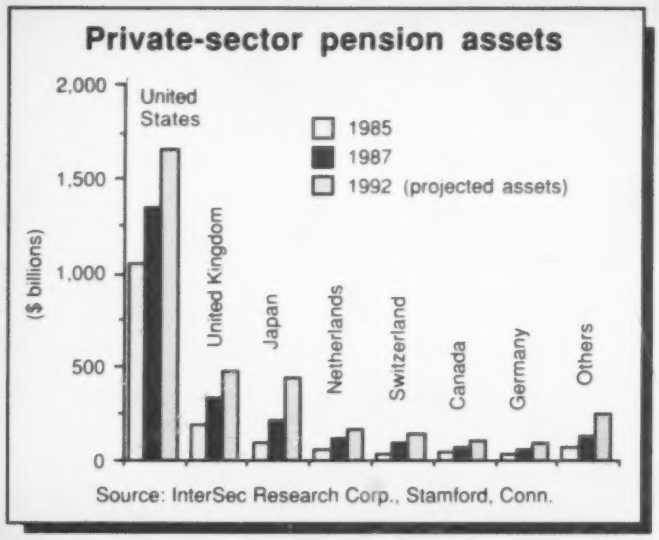


# International interest keen

By Joel Chernoff

Trying to diversify their markets and build important new revenue bases, investment management consultants are setting up shop on foreign shores, trying to tap into the growing pool of foreign-based institutional assets.

During the past 10 years, at least nine firms have expanded operations, primarily to the English-speaking nations of Canada, the United Kingdom and Australia (*see related story on page 18.*). Now eyes are turning toward Japan and continental Europe and the lucrative consulting contracts that promise to be opened up shortly.

"The opportunity clearly is Japan," said Budge Collins, president of Collins Associates, Newport Beach, Calif.

The impact on the bottom line is clear. At Wayne, Pa.-based SEI Corp., foreign consulting is expected to grow to 25% to 30% of total consulting revenue in the next five years, from 10% of its $55 million in consulting revenue now, said Ed Loughlin, senior vice president.

For Frank Russell Co., the Tacoma, Wash., firm thought to be the industry leader, observers believe foreign-based consulting accounts for about half of the consulting revenue.

In terms of market penetration, the numbers don't tell the entire story. For example, there is no way of telling which of several services clients buy. While many include clients buying routine

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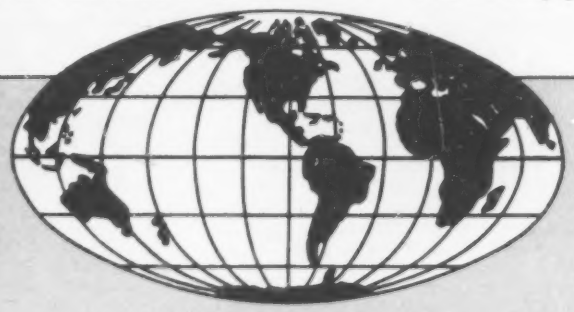

**Non-U.S. investment consulting clients by location of consultant office**

| | |
|---|---|
| **BARRA** | |
| Australia/New Zealand | 15 |
| Canada | 20 |
| Hong Kong | 5 |
| Japan | 40 |
| United Kingdom | 50 |
| TOTAL | 130 |
| **Buck Consultants** | |
| Belgium | 55 |
| Canada | 130 |
| United Kingdom | 100 |
| TOTAL | 285 |
| **The Wyatt Co.** | |
| Australia/New Zealand | 130 |
| Canada | 20 |
| Hong Kong | 125 |
| Other Pacific Basin | 90 |
| United Kingdom | 65 |
| TOTAL | 430 |
| **Collins Associates** | |
| Australia/New Zealand | 3 |
| TOTAL | 3 |
| **InterSec Research** | |
| Australia/New Zealand | 27 |
| Japan | 33 |
| United Kingdom | 42 |
| TOTAL | 102 |
| **Frank Russell Co.** | |
| Australia/New Zealand | 11 |
| Canada | 22 |
| Japan | 4 |
| United Kingdom | 33 |
| TOTAL | 70 |
| **SEI Corp.** | |
| Canada | 450 |
| United Kingdom | 50 |
| TOTAL | 500 |

# Handful affect over $1.5 trillion

By Trudy Ring

Tax-exempt assets of $1.583 trillion come under the influence of 13 of the nation's largest investment consulting firms.

These firms influence their clients' investment judgments through asset allocation studies and, in most cases, assistance with manager selection. (Two of the firms in the accompanying list, BARRA and Richards & Tierney, do no manager searches; another, TPF&C, has gone into the search business only recently.)

The total reflects asset levels reported by the consultants for all their U.S. tax-exempt clients, not just pension funds, which helps to account for the large number. Also, some funds may use different consultants for different tasks, possibly leading to some double-counting in the asset total.

Many consultants said they don't track the amount of money placed through the searches they perform. However, Eager Associates, Louisville, Ky., tracks this by looking at asset shifts publicized in *Pensions & Investment Age* and other industry periodicals.

According to Eager Associates, eight of the top consulting firms placed at least $8.4 billion during the 12 months ended June 30.

The firms and their numbers are SEI Funds Evaluation Services, Wayne, Pa., $1.8 billion; Wilshire Associates, Santa Monica, Calif., $1.8 billion; Callan Associates Inc., San Francisco, $1.2 billion; Rogers, Casey & Barksdale Inc., Stamford, Conn., $1.2 billion; William M. Mercer Meidinger Hansen Inc., Deerfield, Ill., $1 billion; Evaluation Associates Inc., Norwalk, Conn., $590 million; Frank Russell Co., Tacoma, Wash., $539 million; and DeMarche Associates, Kansas City, Mo., $322 million.

Eager Associates' figures are based on published reports, but consultants may have done additional placements in the period represented. One that did provide its own figures to *P&I Age*, Mercer Meidinger Hansen, stated it placed $2.3 billion in the year ended June 30. Another, Callan, announced it placed $3 billion.

SEI officials could not provide figures for that 12-month period, but said the firm placed $4 billion in 1987 and $3.1 billion in the first six months of 1988.

Wyatt Asset Services Inc., Boston, not represented in Eager Associates' data, placed $2 billion in the 12 months ended June 30, Wyatt officials said. Data on placements was not available from another firm in the accompanying list, Collins Associates, Newport Beach, Calif., nor was it in Eager Associates' data.

The degree of consultants' influence varies. Most say the final decision on asset allocation and manager hiring rests with the client.

"In the final analysis, this is their money," said Sandy Lincoln, managing director of Mercer Meidinger Hansen. "If a client says, 'Tell us who to hire,' this is not a question our consultants should answer."

"We are in an advisory capacity, and clients may or may not take our advice," said James F. Beasley, chief operating officer of Rogers, Casey & Barksdale. "Ultimately, it's the client (who makes the decision) — what we're trying to do is bring some expertise to bear."

Some clients want their consultants to be in more than an advisory capacity, however. Collins Associates actually has full discretion over about one-third of its accounts, doing all hiring and firing of managers, said Budge Collins, president.

This is an unusual situation, but the firm's influence is strong even in its other accounts, Mr. Collins said. "Our clients generally take our advice," he said. "If they don't, they usually don't stay clients."

The degree of influence can vary according to the fund size and in-house expertise. "The larger a plan you're dealing with, the less direct influence you have," said Asghar Alam, national director of Wyatt Asset Services.

"Our influence is very substantial with clients where they're looking for us to be the 'prudent expert,' " Mr. Lincoln said. These usually are clients who don't feel they have sufficient expertise in-house, he said.

The proliferation of investment strategies has increased clients' need for consultant expertise, said Ed Loughlin, senior vice president of SEI. "It's a confusing environment out there," he said. "They really do need the guidance and the advice, but they also want to know, what would we do," he said.

"Influence is knowledge, and we help the trustees have more knowledge," added Ron Peyton, president of Callan Associates.

Consultants serving large pools of assets had varying explanations for their prominence in the market. Most of them have some very large funds on their roster — for example, the average public fund client of Wilshire Associates has $5 billion in assets and its average corporate fund client has

*Continued on page 47*

**Tax-exempt assets of consultants' clients**

| Firm | $ billions |
|---|---|
| BARRA | 250 |
| Wilshire Associates | 230 |
| SEI Funds Evaluation | 210 |
| Frank Russell Co. | 200 |
| Callan Associates | 150 |
| Mercer Meidinger Hansen | 150 |
| DeMarche Associates | 100 |
| Rogers, Casey & Barksdale | 100 |
| TPF&C | 100 |
| Richards & Tierney | 55 |
| Wyatt Asset Services | 52 |
| Evaluation Associates | 46 |
| Collins Associates | 40 |

Source: *Pensions & Investment Age*

# Bypassing consultants

## Funds looking for more from their managers

By Fred Williams

While the pension consulting business grows in size and influence each year, some larger pension plan sponsors either don't use a consultant or are turning to their investment managers and master trust banks to act in a consulting capacity in directing the assets of their funds.

The growing sophistication and development of pension plan managers in larger funds is in part responsible for their taking on more responsibility for directing their funds internally with data provided by their banks and specialty investment managers instead of pension consultants.

The use of investment managers in a consulting role was brought to the attention of the pension industry recently by Robert E. Shultz, vice president-pension asset management at RJR Nabisco Inc., Atlanta, and a key industry spokesman for large pension plan sponsors. The Nabisco plan has about $2.5 billion in total assets.

Addressing the Financial Analysts Federation earlier this year, Mr. Shultz said he favored having larger, but fewer, investment manager relationships and tapping managers for input "over and above the portfolio they own."

"In other words, beyond adding value, I would like to use the manager to serve as a consultant to help me do my job better. I would suggest that given the right combination of managers, the sponsor should have the best consultants available in the business," said Mr. Shultz.

Mr. Shultz may not have been the first to use the approach, but he has set the tone for other large plan sponsors who say they can and should use investment managers to help improve overall investment performance beyond just managing a portfolio. Even some pension consultants agree with the approach.

"We've observed that as corporate plan sponsors get smarter and the business becomes more complex many companies are using consultants for project-type work rather than for calling the shots," said Sam DeKinder, executive vice president at DeMarche Associates, Kansas City, Mo.

"We have a number of clients that use us as a data source and gather an opinion from us from their custodian, money managers and banks, then compile the information and make their decisions," said Mr. DeKinder. "We still have a strong input but what

*Continued on page 46*

# Few perceive chips stacked for favoritism

By Carol Wiley

Do consultants focus on a relatively small number of their favorite money managers during searches despite their claims they seek out the "right" managers for their pension fund clients?

Consultants, money managers and an investment adviser marketing firm unsurprisingly said no, as did pension executives for the most part, although all acknowledged some abuses in the industry. One public pension fund, however, had sworn off consultants for eight years until recently, when politics demanded that one be used.

In many cases consultants may recommend the same list of managers several times, particularly if the manager is one of only a few in a specialty; if the manager has supremely good performance numbers; or if the consulting firm is small and cannot afford the large manager data bases on which the larger firms rely. Those surveyed also warned of consultants who may recommend managers with whom they have brokerage or soft-dollar agreements.

However, a software data base system called Tracker sold by Eager Associates, a Louisville, Ky.-based consulting firm, indicates the five largest U.S. consulting firms showed no favoritism in about 2,800 manager searches during the past four years.

The five largest firms — those with the most manager searches in the data base — are, ranked by number of searches: SEI Corp., Deerfield, Ill., which recommended 119 different managers in 236 searches in the data base; William M. Mercer Meidinger Hansen Inc., Louisville, which recommended 94 managers in 142 searches; Wilshire Associates, Santa Monica, Calif., 88 managers in 137 searches; Callan Associates Inc., San Francisco, 68 managers in 86 searches; and Frank Russell Co., Tacoma, Wash., 55 managers in 75 searches.

The three managers hired most often upon recommendation by SEI were The Boston Co., hired 11 times; Sun Banks, Orlando, Fla., 10 times; and Denver Investment Advisors, eight times.

Managers hired most often in searches by Mercer Meidinger Hansen were Trust Co. of the West, Los Angeles, five times; Dimensional Fund Advisors, Santa Monica, four times; and Duff & Phelps Investment Management Co., Chicago, four times.

Managers hired most often in searches by Wilshire include Schroder Capital Management International, New York, five times; Baring International Investment Ltd., London, four times; and Mellon Capital Management, San Francisco, four times.

Managers hired most often upon recommendation by Callan include Bankers Trust Co. — Investment Management Group, New York, four times; and Loomis, Sayles & Co., three times for two different products. Thirteen managers were hired two times each in Callan searches.

Managers hired most often upon recommendation of Russell include Sanford C. Bernstein & Co., New York, four times; Chase Investors Management Corp., New York, four times; and Miller, Anderson & Sherrerd, Bala Cynwyd, Pa., four times.

Only four of the managers were recommended by more than one consultant. They were Loomis, Sayles, recommended by SEI and Callan; J.P. Morgan Investment Management Inc., New York, by Wilshire and Russell; Sanford Bernstein, by Callan and Russell; and T. Rowe Price Associates, Baltimore, by Mercer Meidinger Hansen and Russell.

The data show "consultants play favorites a lot less than the general public thinks," said David Eager, president of Eager Associates. "Most managers think it's difficult breaking in, that it's a closed club. Pension fund sponsors think that too, but it's not true."

"There are some smaller consulting groups that haven't been able to employ the data banks for one reason or another and still may tend to be more specialized, and, because of their situation, use a smaller range of managers," said Dick Silverness, president of Vestmark Inc., a Minneapolis firm that markets managers to consultants. "But that is a function of what they can afford."

Mr. Silverness, the first pension chief at General Mills Corp., Minneapolis, in 1968, was a consultant for 14 years, 10 of those as a partner at Wilshire. He has been president of Vestmark since 1984.

"Unfortunately, there are still some groups of consultants who

*Continued on page 48*

**Two to one: Dick Silverness of Vestmark, left, and Larry Davanzo of Wilshire, right, don't believe favoritism is rampant in the consulting industry; Benchmark Asset's Bob Harrell, center, disagrees.**

**Sydney is one of many cities in Australia where U.S. investment management consultants hope to gain a foothold in the growing pension industry.**

# Australia a star of U.S. hit lists

SYDNEY, Australia — Competition for investment management consulting contracts is heating up Down Under — including efforts by U.S. consultants eager to get a piece of the growing $80 billion Australian pension market.

One of the latest entrants into the consulting field, John A. Nolan & Associates, Melbourne, has ties to three U.S. organizations — William M. Mercer Inc., New York; Collins Associates, Newport Beach, Calif.; and Inter-Sec Research Corp., Stamford, Conn.

Founded in September 1987 by John Nolan, former director-finance and administration of the $1.1 billion State Electricity Commission of Victoria pension fund, the firm is targeting the 12 largest Australian funds — those typically with at least $500 million in assets.

That places Nolan in direct competition with such major consulting forces as Tacoma, Wash.-based Frank Russell Co. and Sydney-based Morrow Australia Pty. Ltd.

Russell officially entered the Australian pension market two years ago, although its organization had provided management consulting advice to Dick Dusseldorp, chairman of Australian real estate developer Lend Lease Corp., as far back as 1983.

Russell now has 11 Australian clients, nine of which are pension-type organizations and two are financial institutions. "Australian plan sponsors and money managers are much more accom-

*Continued on page 47*

# A new tug of war

## 2 groups attempting to woo consultants

By Curtis Vosti

Two organizations are waging a sometimes-acrimonious fight for the allegiance of the growing ranks of consultants interested in the middle-market investor.

While spokesmen for both the Investment Management Consultants Association, Denver, and the Institute for Investment Management Consultants, Scottsdale, Ariz., say their aim is to improve the professionalism of those providing investment services, their organizations have chosen different paths.

(The middle market investor is defined as trustees or individuals in charge of retirement assets between $500,000 and $100 million.)

The IMCA, formed in 1985, claims 350 members and recently certified 32 in its first certification program offered through the Wharton School of Business at the University of Pennsylvania in Philadelphia.

The IIMC, formed in 1986 by some who left the IMCA over a policy split, offered initial memberships this past spring, claims almost 100 members and soon will grant 24 certifications.

"There is no question that the two organizations are competitive and will continue to be competitive," said IIMC Executive Director Jim Johnson.

What they are competing for is the "perhaps 75%" of middle-income funds run by part-time trustees who do not use outside financial advisers, according to Jim Owen, IMCA executive vice president. "The middle-market fund is where the dynamic growth in our industry will occur," he said.

But that anticipated growth also could bring associated problems as brokers expand into consulting. Increasing business could also highlight the traditional problem of lack of standardization within the industry.

"Everyone's a financial planner but few are qualified," said Dan Bott, who helped form the IMCA, but left over a policy dispute on membership. He is now the IIMC's chairman of the board of trustees.

"The potential for abuses in this industry are tremendous," Mr. Owen said.

"Why hasn't our industry dealt with abuses — that we all know about — with managers reporting performance figures? If we don't watch out, the Securities and Exchange Commission is going to come down on us, like it did with mutual funds, and impose standards, and I don't think that's what the industry wants."

George Dunn, past president of the IMCA, agrees with the need for identification of qualified consultants.

"I have a concern that not all of those who call themselves consultants are prepared to be full-blown consultants," Mr. Dunn said. "Our goal is to continue to elevate the profession. We're trying to address the objective of professionalism in the industry."

To address those perceived problems, the two groups have what they say are different approaches, although there are similarities.

Both offer a certification program designed to recognize a certain level of qualifications; both stress the value of continuing education and acknowledge experience in some way. They are disputing title to the service mark "Certified Investment Management Analyst" and other designations, and have exchanged letters claiming those perceived property rights.

There are other, more tangible differences, some of them personal.

Mr. Bott left the IMCA after a disagreement with Mr. Owen over the direction of the organization.

"There was a philosophical difference of opinion between Jim and myself over how the organization should move forward," Mr. Bott said. With an eye toward a growing industry, Mr. Bott thought the IMCA was leaning toward benefiting money managers, like Mr. Owen, at the expense of broker/consultants, like himself.

"The involvement of money managers is important, but the direction has to be controlled by consultants," said Mr. Bott, a vice president and practicing consultant in the Scottsdale office of Shearson Lehman Hutton Inc. Mr. Bott stressed he speaks only for the IIMC.

"I think Dan felt that having money managers involved was somehow a conflict of interests," said Mr. Owen, managing director of NWQ Investment Management Co., Los Angeles.

"We don't agree with that," he said. "There are common problems we all (attorneys, CPAs, money managers and consultants) can meet on and discuss."

Of the eight members of IMCA's board of directors, Mr. Owen said, five are consultants, two are money managers and one an attorney.

There are also differences in the certification programs. While both seek to increase the education of the consultant, there are different qualifications to enter the programs.

The IIMC offers differing levels of certification mainly based on practical experience, according to Mr. Johnson.

Dues for the first year are $175

*Continued on page 47*

DIRECTORY

The information contained in the following profiles was developed by *Pensions & Investment Age* from answers to questionnaires.

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## a

### Analysis Group Inc.

*18 Moore St., Belmont, Mass. 02178; (617) 489-4200*

Analysis Group provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

The firm also offers proxy voting advisory services and economic and financial research.

The firm provides the following to the investment management industry: assistance in voting proxies and proxy administration, and research and analysis of proxy voting issues.

The firm has special expertise in economics, finance and public policy issues affecting institutional investors.

Significant changes or developments at the firm in the past year include the formation of a business unit to advise institutional investors on proxy voting issues.

There are 45 professional consultants. Fees are payable in hard and soft dollars.

James E. Heard, director of institutional financial services unit, is the client contact.

### H B Aschwald & Associates

*P.O. Box 66, Corte Madera, Calif. 94925; (415) 924-1222*

H B Aschwald & Associates provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. investment performance measurement and analysis.

The firm provides the following services to the investment management industry: quantitative performance measurement and quantitative tactical asset allocation.

Aschwald has special expertise in U.S. manager evaluation and selection for plans between $1 million and $15 million.

The firm offers a broker-dealer inventory to clients.

Aschwald provided services to 42 non-retainer clients during the past year, of which 20 were corporate and 22 were public.

There are three professional consultants. Fees are payable in hard and soft dollars.

Howard Aschwald is the client contact.

Public funds: Nov. 28.

### Asset Management Search Consultants

*1400 Skyline Tower, Bellevue, Wash. 98004; (206) 462-5062 or (800) 654-5782*

Asset Management Search Consultants, a subsidiary of Dain Bosworth, provides development of investment policies, objectives and development of appropriate asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

Asset Management Search Consultants has special expertise in working with small plans — those with assets between $100,000 and $5 million.

Of the seven institutional clients on retainer, six are corporate and one is an endowment. The firm also provided services to four corporate non-retainer clients during the past year.

There is one professional consultant. Fees are payable in hard and soft dollars.

Clients include Westmark International, Lutheran Bible Institute of Seattle, Seattle Northwest Securities and Allied Body Corp.

Stephen L. Kessler, president, is the client contact.

## b

### Ballard Biehl & Kaiser Inc.

*2755 Campus Drive, San Mateo, Calif. 94403; (415) 571-5800*

Ballard Biehl & Kaiser Inc. helps develop appropriate asset allocations, focusing on its special expertise of tactical asset allocation among domestic stocks and bonds, international stocks and bonds, real estate, gold and cash.

Ballard Biehl & Kaiser offers two investment vehicles: BB&K International Fund, which is primarily composed of equities and BB&K Diversafund, a global tactical asset allocation vehicle.

Of the 10 clients on retainer, eight are corporate and two are public.

There are four professional consultants. Fees are payable in hard and soft dollars.

Clients include Bechtel, California Public Employees', Ameritech and Hughes Aircraft.

Brian E. Schaefer is client contact.

### BARRA

*1995 University Ave., Suite 400, Berkeley, Calif. 94704; (415) 548-5442*

BARRA provides development of investment policies, objectives and asset allocation; and U.S. and foreign investment performance, measurement and analysis.

The firm also offers portfolio risk analysis and optimization; asset allocation tools; currency risk modeling; multiple manager analysis and optimization; normal portfolio construction; fulfillment fund construction; customized risk and valuation models; and seminars and newsletters.

The firm provides the following to the investment management industry: U.S. and international equity and fixed-income analyses; risk models of the world's major capital markets; and value-added consulting.

The firm has special expertise in quantitative investment methods.

During the past year, the firm opened offices in Hong Kong and Sydney and expanded its Tokyo office.

The are approximately 250 retainer clients, of which 50 are corporate, 10 are public and the remainder a mix of institutions, money managers and other consultants. Services also were provided to 50 non-retainer clients during the past year.

There are 60 professional consultants. Fees are payable in hard and soft dollars.

Barbara Hodges is the client contact.

### Bateman Eichler, Hill Richards Inc.; The Consulting Group

*700 S. Flower St., Suite 2700, Los Angeles, Calif. 90017-4259; (213) 683-3979*

Bateman Eichler, Hill Richards Inc.; The Consulting Group, a unit of Bateman Eichler, Hill Richards Inc., provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm has special expertise in multimanager portfolio analysis.

Of the 270 institutional clients on retainer, 227 are corporate, three are public and 40 are union.

There are 12 professional consultants. Fees are payable in hard and soft dollars.

The firm is introducing an investment vehicle, the Collective Trusts, in this quarter.

Steven W. Arnold and Thomas Y. Sakai, managing directors, are the client contacts.


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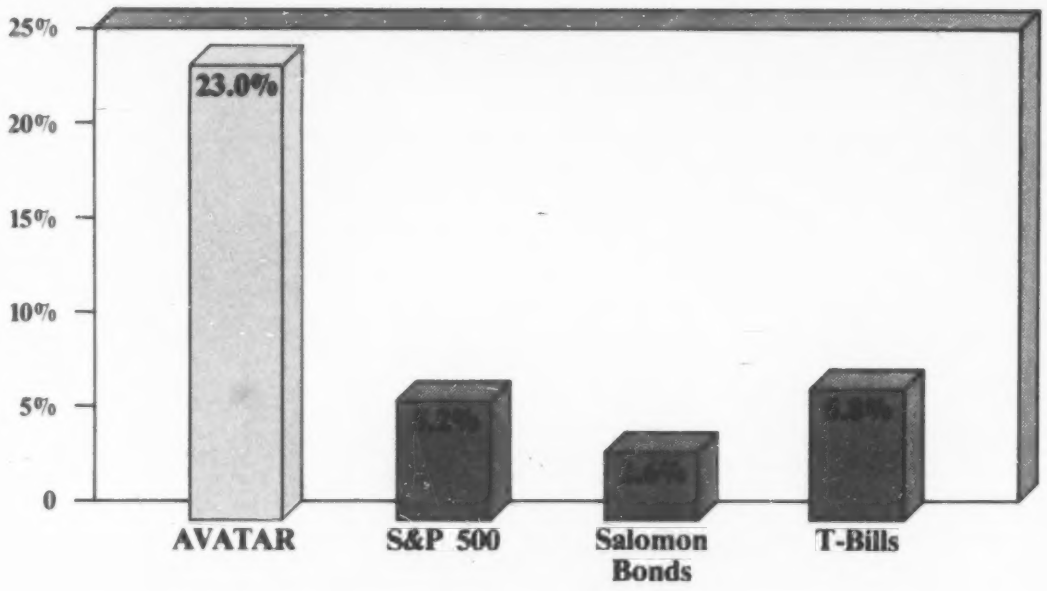


Performance is the mean time-weighted total rates of return of all discretionary tax-exempt accounts over $1 million. Past performance is no guarantee of future results.

■ EQUITY PORTFOLIO MANAGEMENT. Active stock selection (large capitalization issues) combined with the critical portfolio stocks/cash mix shifts.

■ TACTICAL ASSET ALLOCATION. Same asset mix shifts cost-efficiently implemented with an index fund and cash fund. Or, use stock index futures as an "invisible" hedge overlay to actively/passively managed equities.

AVATAR ASSOCIATES — 900 Third Avenue, NY, NY 10022 — Bruce Poliquin, VP, (212) 753-7710

### E.M. Beam & Associates

*12813 E. Paul, Clovis, Calif. 93612; (213) 688-6698 or (209) 299-4152*

E.M. Beam & Associates, a subsidiary of Morgan, Olmstead, Kennedy & Gardner Inc., provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm provides the following services to the investment management industry: analysis of the effectiveness of equity transactions and relative strength of industry participation.

The firm has special expertise in analysis of equity involvement in a portfolio.

Of the five retainer clients, four are corporate and one is union. The firm also provided services to five non-retainer clients during the past year, of which three were corporate, one was public and one was union.

There are two professional consultants. Fees are payable in hard and soft dollars.

Ed Beam is the client contact.

### Becker, Burke Associates

*221 N. LaSalle St., Suite 1000, Chicago, Ill. 60601; (312) 782-5665*

Becker, Burke Associates Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; U.S. performance measurement and analysis; and analysis of foreign investment performance.

The firm also offers customized performance standards, performance-based fees and health and casualty insurance investment policy.

The firm provides the following to the investment management industry: performance measurement and evaluation and customized performance standards.

The firm has special expertise in investment policy asset allocation, manager search, performance evaluation, performance-based fees and Blue Cross-Blue Shield.

Of the 31 clients on retainer, 13 are corporate, nine are public, four are union with five in other categories. The firm also provided services to six non-retainer clients during the past year, of which three were corporate, two were public and one that did not fit these categories.

There are four professional consultants. Fees are payable in hard and soft dollars.

Clients include Chicago Municipal Employees, State of Vermont, Perkin-Elmer and Nalco Chemical.

Howard H. Pohl is the client contact.

### Berg Fiduciary Consultants

*363 Westchester Ave., Port Chester, N.Y. 10573; (914) 937-7111*

Berg Fiduciary Consultants Inc., an affiliate of Plan Sponsor Network Inc., provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; U.S. performance measurement and analysis; and foreign investment performance measurement.

The firm also offers assistance with 401(k) investment supervision planning and direct investment management responsibilities of 401(k) managers, and negotiation of guaranteed investment contracts.

The firm provides the following to the investment management industry: rankings in peer group within the Plan Sponsor Network manager data base.

The firm has special expertise in evaluation of equity and fixed-income managers.

During the past year, the firm added a principal, Mary Anne Johnson, specializing in equity manager strategy and evaluation projects.

Of the 12 clients on retainer, eight are corporate, one is public and three are union. The firm also provided services to three non-retainer clients during the past year, of which two were corporate and one was public.

There are two professional consultants. Fees are payable in hard and soft dollars.

Clients include Continental Airlines, ICMA Retirement, Insilco and United Food and Commercial Workers.

Paul E. Berg, president, is the client contact.

### Berla Investment Consulting

*P.O. Box 4332, Walnut Creek, Calif. 94596; (415) 947-0326*

Berla Investment Consulting provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm has special expertise in performance measurement and analysis.

Of the 20 retainer clients, 14 are corporate, three are public and three are union. The firm also provided services to three non-retainer clients during the past year, of which two were corporate and one was union.

There are two professional consultants. Fees are payable in hard dollars.

Retainer clients include Merritt Peralta Medical Center, Plumber and Steamfitters Local 393, Santa Barbara Savings & Loan and Valley Memorial Hospital.

George A. Berla, president, is the client contact.

### Alan D. Biller & Associates

*P.O. Box 879, Palo Alto, Calif. 94302; (415) 326-7283*

Alan D. Biller & Associates provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. performance measurement.

The firm also offers consulting services on an on-going basis for several Taft-Hartley plans.

The firm provides the following service to the investment management industry: the licensing of Pensions Options, a proprietary asset/liability optimization planning software tool.

The firm has special expertise in asset/liability analysis and implementation of plan policies.

There are two union retainer clients.

There are three professional consultants. Fees are payable in hard and soft dollars.

Clients include the Western Conference of Teamsters and the ILWU-PMA.

Alan Biller is the client contact.

### Boettcher & Co. — Investment Management Group

*828 17th St., Denver, Colo. 80202; (303) 628-8488*

Boettcher & Co. provides development of investment policies, objectives

and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm has special expertise in risk evaluation and asset allocation.

Of the 235 retainer clients, 195 are corporate, 34 are public and six are union. The firm also provided services to seven non-retainer clients during the past year.

There are 10 professional consultants. Fees are payable in hard and soft dollars.

Clients include Western Farm Bureau, University of Wyoming, U.S. Volleyball Association and Blue Cross/Blue Shield.

Michael Bunn, senior vice president and director, is the client contact.

### BT Information Services

*280 Park Ave., New York, N.Y. 10017; (212) 850-4309*

BT Information Services, a subsidiary of Bankers Trust Co., provides development of investment policies, objectives and asset allocation; and U.S. and foreign investment performance measurement and analysis.

The firm also provides BT Monitor, which enables clients to monitor trade executions and brokerage commissions.

There are 86 retainer clients, of which 78 are corporate, two are public and six are union.

There are five professional consultants. Fees are payable in hard and soft dollars.

The firm can provide investment vehicles through Bankers Trust Co. — Investment Management Group.

Clients include Bechtel, Hershey Foods, Lockheed and Shell Oil.

Harvey D. Hirsch, vice president, is client contact.

### Buck Pension Fund Services

*2 Pennsylvania Plaza, New York, N.Y. 10121; (212) 330-1300*

Buck Pension Fund Services, a subsidiary of Buck Consultants Inc., provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers GIC consulting services.

The firm provides assistance in the construction of benchmark portfolios to the investment management industry.

Significant changes or developments at the firm in the past year include the introduction of benchmark portfolio services.

Of the 35 clients on retainer, 29 are corporate, four are public and two are union. The firm also provided services to 20 non-retainer clients during the past year, of which 18 were corporate and two were public.

There are seven professional consultants. Fees are payable in hard and soft dollars.

Clients include New York State Teachers, Connecticut Mutual Equity Fund, Southwestern Bell and Sara Lee.

Catherine A. Higgins, president, is the client contact.

### Butcher Consulting Group

*2500 Grant Building, Pittsburgh, Pa. 15219; (412) 232-1000*

Butcher Consulting Group, a subsidiary of Butcher & Co., provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm offers the GRID (Graphical Ranking of Investment Descriptors) portfolio classification and ranking system for use in manager selection and the STIFS (Short Term Investment Fund Summary) data base of cash managed funds and portfolios. The firm also offers evaluation of cash managers.

The firm provides the GRID and STIFS data base performance results to the investment management industry.

The firm has special expertise in working with non-profit organizations, particularly hospitals, using microcomputer graphics and statistical data bases and working with clients of $25 million to $350 million.

Significant changes or developments at the firm in the past year are the introduction of STIFS.

Of the 85 clients on retainer, 42 are corporate, six are public, five are union and 32 are non-profit institutions. The firm also provided services to 15 non-retainer clients during the past year, of which eight were corporate, five were public and two were union.

There are 11 professional consultants. Fees are payable in hard and soft dollars.

Clients include City of Pittsburgh, Duquesne Light, Rorer and Shadyside Hospital.

James E. Yanni and Terry Bilkey, senior vice presidents, are the client contacts.


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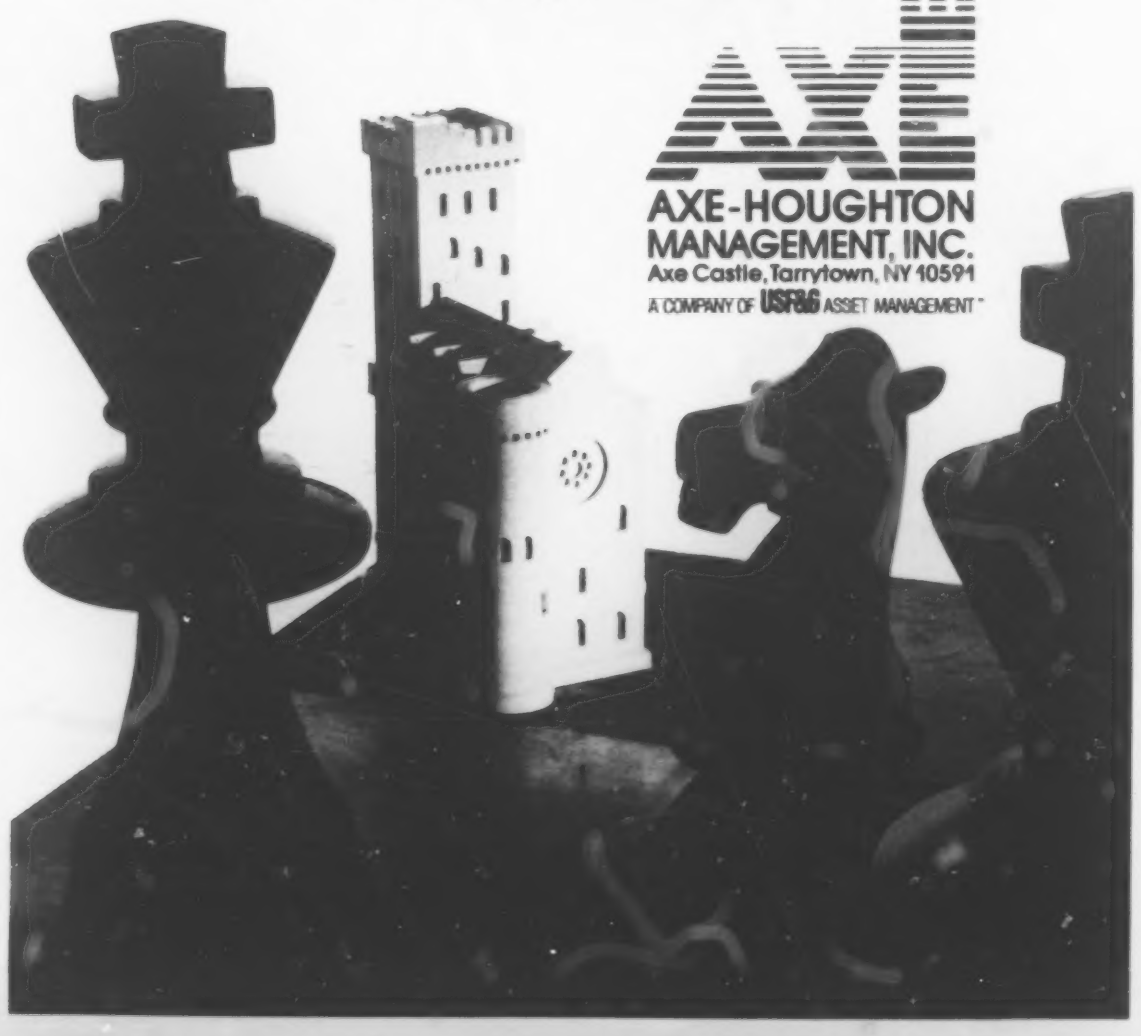

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## C

### Callan Associates Inc.

*71 Stevenson St., Suite 1300, San Francisco, Calif. 94105; (415) 974-5060*

Callan Associates Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers portfolio audit service, equity and fixed-income style analysis, performance attribution analysis, manager structure analysis, trading cost analysis, software planning tools for PCs, educational services and real estate investment consulting services.

The firm provides the following services to the investment management industry: manager style analysis, investment measurement, portfolio monitoring, trading cost analysis, performance attribution analysis, presentation consulting and special projects.

The firm has special expertise in strategic planning services, real estate program administration and management, portfolio auditing, educational services and nuclear decommissioning fund consulting.

Significant changes or developments at the firm in the past year are the addition of the Callan real estate services, the Taft-Hartley and the manager services divisions.

Of the 178 clients on retainer, 61 are corporate, 38 are public and 29 are union, with 50 clients in other institutional categories. The firm also provided services to 66 non-retainer clients during the past year, of which 32 were corporate, 14 were public, 10 were union and 10 were in other institutional categories.

There are 27 professional consultants. Fees are payable in hard and soft dollars.

Ronald D. Peyton, president, is client contact.

### Cambridge Associates Inc.

*1 Financial Center, Boston, Mass. 02111; (617) 439-3232*

Cambridge Associates Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers to all clients extensive investment and financial planning research reports.

The firm has special expertise in financial and investment planning for non-profit institutions, with extensive coverage of non-traditional assets.

There are 200 endowment clients on retainer.

The firm is affiliated with Lewis Bailey Associates, which deals exclusively

...h corporate institutional clients and ...rge family groups.

There are 20 professional consultants. Fees are payable in hard and soft dollars.

Clients include Harvard University, MacArthur Foundation, Metropolitan Museum of Art and the University of Texas.

David B. Thurston is the client contact.

### The Capital Control Group

*108 Wilmot Road, Suite 220, Deerfield, Ill. 60015; (312) 940-4901*

The Capital Control Group Ltd. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. investment performance measurement and analysis.

The firm also offers close assistance to trustees in establishing a written statement of goals and objectives, manager searches and monitoring and the implementation of established goals and objectives.

The firm provides brokerage and monitoring of performance to the investment management industry.

The firm has special expertise in dealing with Taft-Hartley plans.

Significant changes or developments at the firm in the past year include the addition of Alan M. Meyer as a consultant.

Of the 35 clients on retainer, 30 are corporate and five are union. The firm also provided services to 50 non-retainer clients during the past year.

There are four professional consultants. Fees are payable in hard and soft dollars.

Clients include Plumbers/Pipefitters locals 219 and 85, Ford Tool and Parkway Bank of Chicago.

Jay Rosen, president, is client contact.

*Pensions & Investment Age* will profile the nation's largest pension funds Jan. 23.

### Capital Management Sciences

*10920 Wilshire Blvd., Suite 1203, Los Angeles, Calif. 90024; (213) 824-9715*

Capital Management Sciences provides fixed-income and asset allocation software for immunization, indexation, cash matching, FASB, security valuation, structured management and performance attribution. The firm also provides customized software products.

There are approximately 140 clients. There are eight professional consultants. Fees are payable in hard and soft dollars.

Laurie S. Adami, senior vice president, is client contact.

### Capital Trust Co.

*4380 S.W. Macadam Ave., Portland, Ore. 97201; (503) 228-2300*

Capital Trust Co., a subsidiary of The Lexington Group, provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign investment performance measurement and analysis.

The firm also offers tactical asset allocation.

It has special expertise in the development of investment policy, strategic asset allocation and the evaluation of investment managers for unique asset classes, such as international equities and venture capital.

Significant changes or developments at the firm in the past year include the merger of CTC with The Lexington Group, a financial services holding company.

Of the four institutional clients on retainer, three are corporate and one is public. The firm also provided services to four corporate non-retainer clients during the past year.

There are five professional consultants. Fees are payable in hard and soft dollars.

The firm offers six commingled funds for its tax-exempt clients.

Clients include the Public Employees Association of Colorado, Pacific Power & Light and Pay Less Drug Stores.

Ralph C. Rittenour Jr., managing director, is the client contact.

### The Carmack Group Inc.

*201 S. Lake Ave., Pasadena, Calif. 91101; (818) 449-0721*

The Carmack Group Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers expert witness and quantitative studies.

The firm provides quarterly "MPR" graphic analyses of investment performance to the investment management industry.

It has special expertise in performance attribution and development of relevant peer group and normal portfolios.

There are 11 corporate retainer clients. The firm also provided services to eight corporate non-retainer clients during the past year.

There are 12 professional consultants. Fees are payable in hard and soft dollars.

Clients include Cal Tech, Lear Siegler, Loyola Marymount University and AH&L.

J.A. Carmack is client contact.

### C&B Consulting Group

*231 S. Bemiston, St. Louis, Mo. 63105; (314) 725-0114*

C&B Consulting Group, a subsidiary of Corroon & Black Corp., provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement.

The firm also offers GIC selection.

It has special expertise in actuarial/asset/liability analysis.

There are four professional consultants. Fees are payable in hard dollars.

J. Reuben Rigel is the client contact.

### CDA Investment Technologies Inc.

*1355 Piccard Drive, Rockville, Md. 20854; (301) 975-9600*

CDA Investment Technologies Inc., a subsidiary of International Thomson Organization Ltd., provides development of appropriate asset allocation; U.S. manager evaluation and selection; and U.S. and foreign investment performance measurement and analysis.

The firm provides the following to the investment management industry: guidance in asset allocation development, U.S. manager evaluation and selection, domestic performance measurement and analysis.

The firm has special expertise in on-line and personal computer systems, performance measurement and universe comparisons with color graphics.

There are 1,000 non-retainer clients.

There are 10 professional consultants. Fees are payable in hard and soft dollars.

James Warren, vice president, is client contact.

### C.E.D.A.R. Investment Services Ltd.

*902 Kapilano, 100 Park Royal, West Vancouver, British Columbia V7T 1A2; (604) 926-7355*

C.E.D.A.R. Investment Services Ltd., a subsidiary of Crawford E. Laing Ltd., provides development of investment policies, objectives and asset allocation; Canadian manager evaluation and selection; and Canadian investment performance measurement and analysis.

The firm also offers analysis of corporate responsibility for investments.

It provides an ethical pooled pension trust fund to the investment management industry.

A reputation for being a source of strength in troubled waters isn't built overnight.

In fact, the conservative, risk-averse financial principles that built Republic National Bank of New York have their origins in the practices of the century-old Safra family banking traditions.

This thread has also guided our investment philosophy which emphasizes investment in a portfolio of mutual funds–a most effective way to:

1. Reduce risk in today's volatile markets through a high level of diversification.
2. Preserve capital.
3. Provide a proven record of consistently rewarding investment results.

All the above is accomplished through careful asset allocation based on client guidelines and a disciplined selection of a portfolio of mutual funds representing the top money managers proven over a period of time.

Our service at RNB provides pension, thrift and profit-sharing funds with a secure harbor.

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The firm has special expertise in the analysis of corporate responsibility.

Significant changes or developments at the firm in the past year include a clientele shift toward union accounts.

Of the 12 clients on retainer, six are corporate, two are public and four are union. The firm also provided services to nine non-retainer clients during the past year, of which two were corporate, two were public and five were union.

There are two professional consultants. Fees are payable in hard dollars.

Its investment fund is the C.E.D.A.R. Balanced Fund.

Crawford E. Laing, president, is client contact.

### Burgess Chambers and Associates

*P.O. Box 3316, Winter Park, Fla. 32790; (407) 644-0111*

Burgess Chambers and Associates provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. investment performance measurement and analysis.

The firm has special expertise in developing statements of investment policy, investment manager searches and monitoring manager performance.

It has two retainer clients, one corporate and one union. The firm also provided services to five corporate non-retainer clients during the past year.

There are two professional consultants. Fees are payable in hard dollars.

Burgess Chambers is client contact.

### Collins Associates

*840 Newport Center Drive, Suite 660, Newport Beach, Calif. 92660; (714) 644-5771*

Collins Associates provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers pre-funding of post-retirement health benefits and a variety of other services, including assisting with policy setting.

The firm has special expertise in researching the entire universe of investment managers, including specialized research on the high-performing, small investment manager.

Significant changes or developments at the firm in the past year are the installation of a second generation computer system and interoffice network.

Of the 21 clients on retainer, 17 are corporate and four are endowments and trusts.

There are nine professional consultants. Fees are payable in hard dollars.

Clients include FMC, Safeway Stores, Sunkist Growers and Xerox.

Budge Collins, president, is client contact.

### Colonial Consulting Corp.

*610 Fifth Ave., Suite 420, New York, N.Y. 10020; (212) 307-1830*

Colonial Consulting Corp. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm provides the following to the investment management industry: CCX Investment Manager Database, Endowment and Foundation Database/Index and Performance Snapshot.

Significant changes or developments at the firm in the past year include the development of the CCX Manager Database.

Of the 14 clients on retainer, two are corporate and 12 are endowments and foundations.

There are three professional consultants. Fees are payable in hard and soft dollars.

Clients include Dominion Resources, AUB, YMCA and the Carnegie Endowment Fund.

John K. Goodrich, president, is client contact.

### Consulting Services Group

*Suite 900, The Financial Center, Birmingham, Ala. 35203; (205) 250-5615*

Consulting Services Group, a subsidiary of the Robinson-Humphrey Co., provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

The firm also offers specialized monthly reporting to reflect calendar and fiscal year performance.

The firm provides master trustee and custodial services and record keeping to the investment management industry.

The firm has special expertise in assisting the qualified plan market in the $5 million to $50 million range.

Significant changes or developments at the firm in the past year are the installation of a computer system utilizing UNIX.

There are 200 corporate retainer clients. In the past year, the company has served 50 corporate non-retainer clients.

There are four professional consultants. Fees are payable in hard and soft dollars.

John G. Brock, senior vice president, is the client contact.

## d

### Dahab Associates Inc.

*52 Nassau Ave., Islip, N.Y. 11751; (516) 277-8301*

Dahab Associates Inc. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

The firm has special expertise in custom computer software development for modeling and report generation.

Of the 28 clients on retainer, eight are corporate, seven are public, seven are union and six are endowments.

There are two professional consultants. Fees are payable in hard and soft dollars.

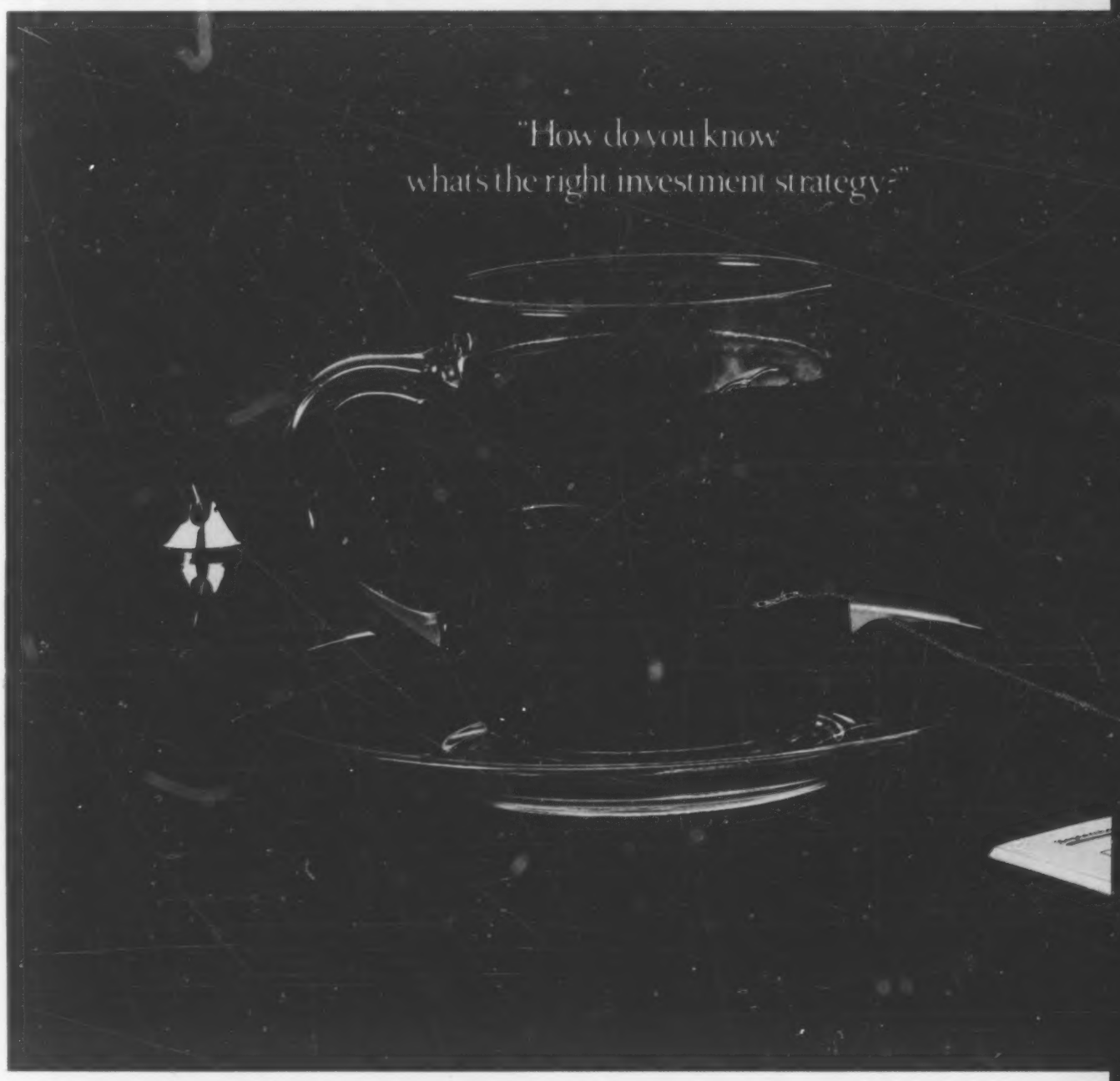
Clients include Pennsylvania Municipal, Sonat, Guideposts Associates and City of Norfolk.

Richard E. Dahab, president, is client contact.

### Davies Investment Associates Inc.

*P.O. Drawer 56246, Atlanta, Ga. 30343; (404) 525-7541*

Davies Investment Associates Inc.

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provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm is fully qualified in both assets (C.F.A.) and liabilities (actuary).

Of the 10 clients on retainer, five are corporate and five are public. The firm also provided services to 15 non-retainer clients during the past year, of which seven were corporate, seven were public and one was union.

There is one professional consultant. Fees are payable in hard and soft dollars.

Clients include Browning-Ferris Industries, City of Sioux Falls and City of Wichita.

James J. Davies is the client contact.

### DeMarche Associates

*P.O. Box 7027, Kansas City, Mo. 64113; (913) 384-4994*

DeMarche Associates provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm provides the following to the investment management industry: performance monitoring and industry/sector valuation models.

It has special expertise in customized, proprietary research.

Of the 129 clients on retainer, 63 are corporate, 24 are public, seven are union and 35 are foundations and endowments. The firm also provided services to 25 non-retainer clients during the past year, of which 20 were corporate and five were public.

There are 17 professional consultants. Fees are payable in hard and soft dollars.

Clients include Inland Steel, Baxter Healthcare, Control Data and Levi Strauss.

Steven D. Farrell, vice president, is client contact.

*Pensions & Investment Age's* book of lists: Dec. 26.

### Dorn & Helliesen Inc.

*300 Tamal Plaza, Suite 270, Corte Madera, Calif. 94925; (415) 924-1200*

Dorn & Helliesen Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. performance measurement and analysis.

The firm has special expertise in policy and guidelines, asset allocation, manager structure analysis and manager evaluation and selection.

Of the 12 clients on retainer, seven are corporate, four are public and one is union. The firm also provided services to four corporate non-retainer clients during the past year.

Fees are payable in hard dollars.

Clients include Albertson's, Contra Costa County, Ventura County and Simplot.

Robert Helliesen, principal, is client contact.

## e

### EEI-Effron Enterprises Inc.

*363 Westchester Ave., Port Chester, N.Y. 10573; (914) 939-0200*

EEI-Effron Enterprises Inc. provides U.S. and foreign performance measurement and analysis, and portfolio accounting.

The firm also offers a transaction accounting and reporting software system.

It provides data collection, analysis, computer software and related services associated with performance measurement and portfolio accounting to the investment management industry.

The firm has special expertise in performance measurement and portfolio accounting.

Significant developments at the firm during the past year include the development of PC-based products and an international performance measurement product.

There are four professional consultants. Fees are payable in hard and soft dollars.

The client contact is Stephen J. Klein.

### J.H. Ellwood & Associates

*175 W. Jackson Blvd., Chicago, Ill. 60604; (312) 987-9008*

J.H. Ellwood & Associates Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers special studies; convertible searches; insurance contract negotiation, search and evaluation; real estate manager evaluation and selection; master trust/custodial evaluation and selection; third-party record-keeper/administrator evaluation and selection; 401(k) plan design; monitoring of legal and plan accounting issues; and defining actuarial policy and funding objectives.

The firm has special expertise in the integration of policy issues in the areas of investment administration, actuarial practice and investments to achieve a coherent, effective and cost-efficient investment program.

There are 46 institutional retainer clients.

There are six professional consultants. Fees are payable in hard dollars.

Clients include Brown Group, Lutheran Church-Missouri Synod, St. Louis County and Noble Foundation.

John H. Ellwood, president, is client contact.

### Ennis, Knupp & Associates

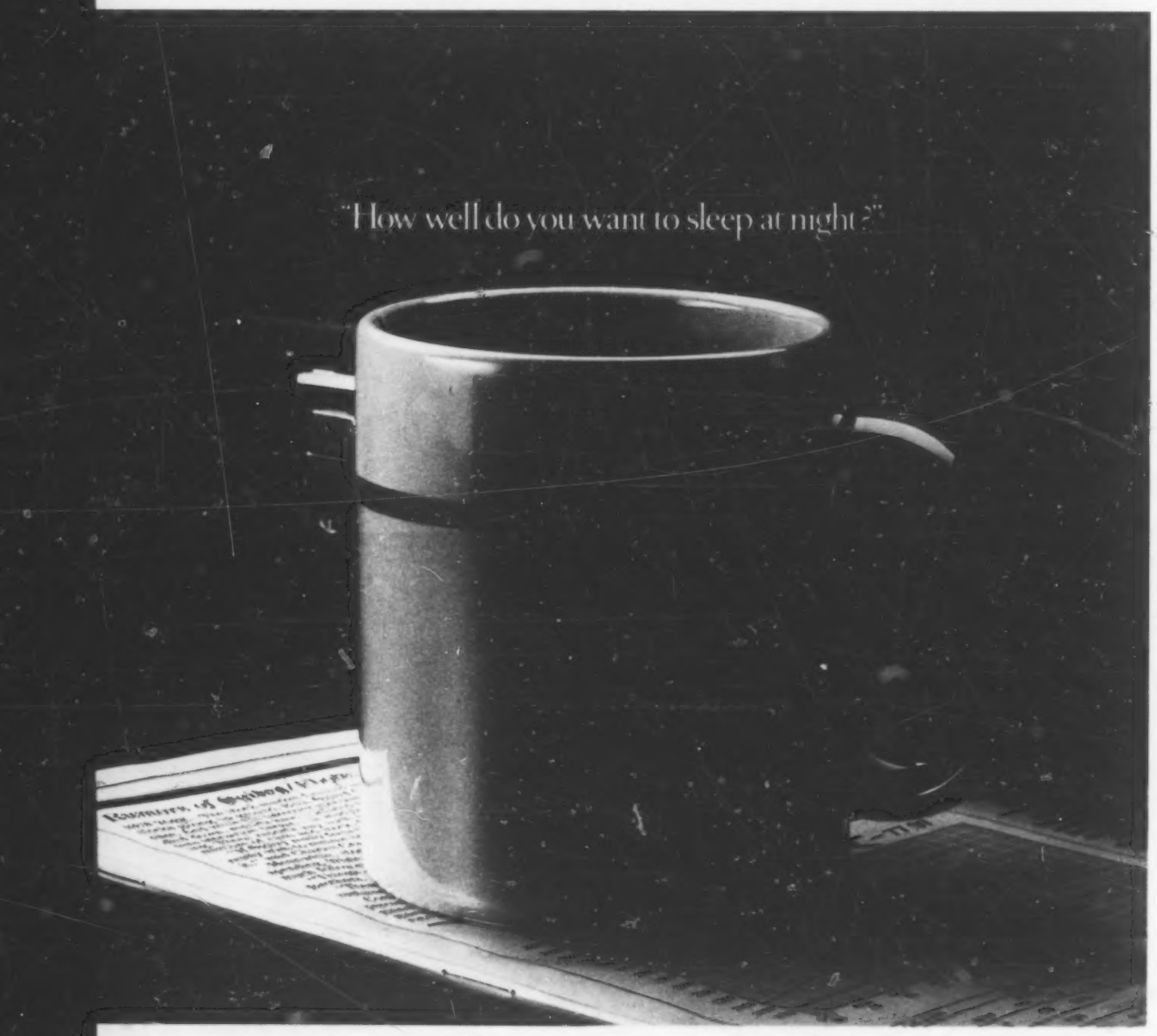
*11 S. LaSalle St., Suite 1440, Chicago, Ill. 60603; (312) 263-4300*

Ennis Knupp & Associates provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers real estate manager evaluation and selection, real estate investment performance measurement and analysis, optimal manager structures, contract analysis, asset and liability analysis and topical research.

The firm has special expertise in investment policy analysis, asset allocation optimization and manager structure and analysis.

*Pensions & Investment Age* will highlight public funds in the Nov. 28 issue.

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A significant development at the firm in the past year has been the development of on-line integration of policy analysis, manager structure and performance evaluation.

Of the 30 clients on retainer, 11 are corporate, four are public, three are union and 12 are in other institutional categories, including foundations, endowments and non-profit organizations. The firm also provided services to 16 non-retainer clients during the past year, of which two were corporate, three were public, two were union and nine were in other institutional categories.

There are 13 professional consultants. Fees are payable in hard and soft dollars.

Clients include Georgia-Pacific, Chicago Police, MacArthur Foundation, Central Pension Fund of the I.U.O.E.

James F. Knupp, principal, is client contact.

### Equitable Securities Investment Management Evaluation

*First American Center, Nashville, Tenn. 37219; (615) 244-9420*

Equitable Securities Investment Management Evaluation, a subsidiary of Equitable Securities Corp., provides development of investment policies, objectives and appropriate asset allocation; U.S. and foreign manager evaluation and selection; and U.S. performance measurement and analysis.

The firm has special expertise in independent performance monitoring, relative return analysis, and manager recommendation of accounts less than $50 million.

Of the 16 clients on retainer, 15 are corporate and one is public. The firm also provided services to 10 corporate non-retainer clients during the past year.

There are three professional consultants. Fees are payable in hard and soft dollars.

Clients include Tennessee Bone and Joint Clinic, Metro Nashville Public Employees and the Longleat Fund.

Ward Cammack is the client contact.

### Evaluation Associates Inc.

*200 Connecticut Ave., Norwalk, Conn. 06854; (203) 855-2200*

Evaluation Associates Inc., a subsidiary of MONY Financial Services Inc., provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers a series of publications profiling investment managers.

It also provides publications on managers to the investment management industry.

The firm has special expertise in money manager research and in qualitative investment consulting.

Significant changes or developments at the firm in the past year are the appointment of Phil Maisano as president May 1.

Of the 51 clients on retainer, 29 are corporate, seven are public, two are union and 13 are endowments and foundations. The firm also provided services to 11 non-retainer clients during the past year, of which five were corporate, one was union and five were endowments and foundations.

There are eight professional consultants. Fees are payable in hard and soft dollars.

The firm offers several investment vehicles: 13 multiple manager mutual funds marketed to smaller, regional banks and insurance companies; and eight small manager/development funds (multiple manager) offered to institutional investors.

Clients include American Stores, City of Baltimore, Colgate Palmolive and Pennsylvania Public Schools.

Robert B. Mayerick, vice president, is the client contact.

*Pensions & Investment Age*'s 15th anniversary issue: Oct. 31.

## f

### Fiduciary Services

*6 Landmark Square, Stamford, Conn. 06901; (203) 322-0010*

Fiduciary Services, a subsidiary of Fiduciary Services Inc., provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm has special expertise in measuring the investment performance of domestic, international and global investment portfolios.

The firm provided services to three non-retainer clients during the past year.

The firm employs two professional consultants. Fees are payable in hard and soft dollars.

Christine Rock, president, is client contact.

### Financial Control Systems

*200 Chadds Ford Professional Center, Chadds Ford, Pa. 19380; (215)436-6563*

Financial Control Systems Inc. provides financial accounting control and investment performance monitoring; pension fund/custodial bank auditing; commission and execution analysis; flexible reporting; and financial control systems.

The firm provides financial control, accounting, performance monitoring and auditing systems to the investment management industry.

The firm has special expertise in financial control, accounting, performance monitoring and auditing systems.

The firm provides services to 16 corporate, five public and one Taft-Hartley retainer clients. The firm also provided services to one public non-retainer client during the past year.

There are five professional consultants. Fees are payable in hard and soft dollars.

Clients include Amoco, Campbell Soup, State of Minnesota and Chicago Transit Authority.

Craig E. Heatter, senior vice president, is client contact.

### First Financial Evaluation Services

*9200 Shelbyville Road, Suite 723, Louisville, Ky. 40222; (502) 425-8011*

First Financial Evaluation Services provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm provides specialty performance charts to the investment management industry.

It has special expertise in performance evaluation and monitoring and manager searches.

Of the 14 clients on retainer, 13 are corporate and one is union.

There are three professional consultants. Fees are payable in hard and soft dollars.

E.G. Lehman Jr., president, is client contact.

### Gifford Fong Associates

*1600 Riviera Ave., Suite 285, Walnut Creek, Calif. 94596; (415) 932-1910*

Gifford Fong Associates, a subsidiary of Prudential Insurance Co., provides development of investment policies, objectives and asset allocation; and U.S. performance measurement and analysis.

The firm provides consulting services and proprietary investment analytical tools to managers of large pools fixed-income and equity assets.

It has special expertise in asset allocation fixed income, (sensitivity analy-


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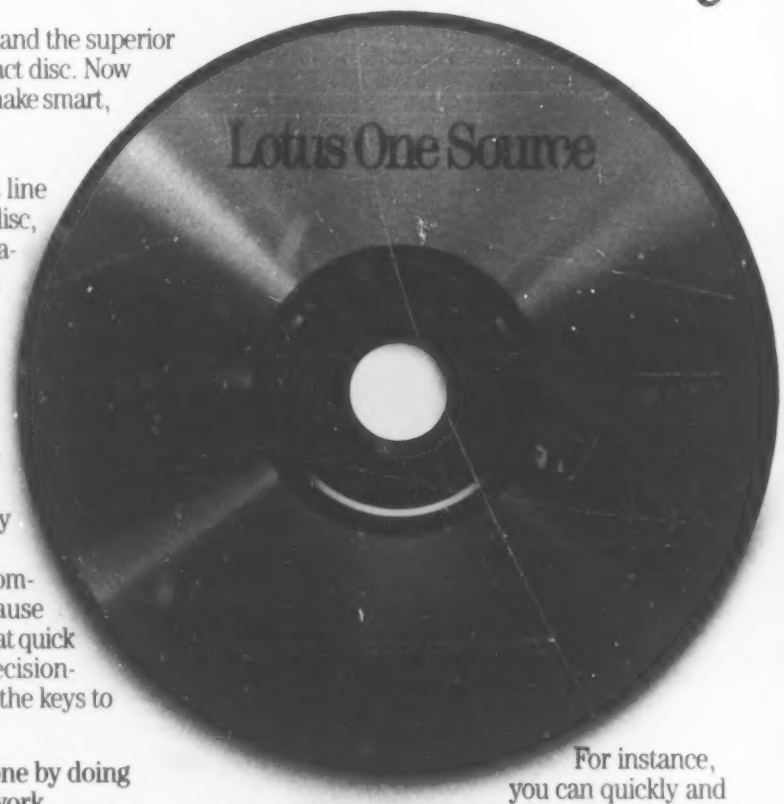


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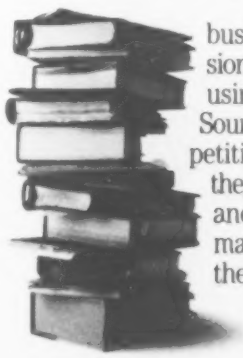

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sis, immunization, indexation, bond valuation and performance attribution) and equity (portfolio optimization, risk profile and performance attribution).

Significant developments in the past year include the enhancement of a contingent claims model for fixed-income securities.

Fees are payable in hard and soft dollars.

Tom Nichols is client contact.

### Fund Evaluation Group Inc.

*414 Walnut St., Suite 812, Cincinnati, Ohio 45202; (513) 977-4400*

Fund Evaluation Group Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign investment performance measurement and analysis.

The firm has special expertise in the area of risk evaluation of balanced, fixed-income and equity portfolios, and in working with non-profit institutions and insurance companies.

Of the 45 clients on retainer, 33 are corporate, eight are public and four are union. The firm also provided services to one corporate non-retainer client during the past year.

There are five professional consultants. Fees are payable in hard and soft dollars.

Clients include Indiana University Foundation, Michigan State University Foundation and State of Michigan Legislative Retirement System.

H. Bradley Eden, president, and Frederick J. Diamond, chief executive officer, are the client contacts.

## g

### Garmaise & Associates Ltd.

*Royal Bank Plaza, North Tower, Suite 1560, P.O. Box 144, Toronto, Ontario M5J 2J3; (416) 364-0351*

Garmaise & Associates Ltd. provides Canadian and foreign performance measurement and analysis.

The firm offers Canadian index and GIC funds and unitholder record-keeping software.

Of the 50 clients on retainer, 45 are corporate and five are public. The firm also provided services to 10 corporate non-retainer clients during the past year.

Fees are payable in hard and soft dollars.

Gordon Garmaise is client contact.

## h

### Hamilton & Co. Inc.

*101 Carnegie Center, Princeton, N.J. 08540; (609) 452-0300*

Hamilton & Co. Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers Sharpshooter, an audit and reconciliation service that audits all activities that occur in the custodial and investment management area.

The firm has special expertise in value-added investment consulting in all aspects of the investment process.

Significant developments at the firm in the past year include the opening of an Atlanta office.

Of the 50 clients on retainer, 30 are corporate, eight are public and 12 are union.

There are 10 professional consultants. Fees are payable in hard and soft dollars.

Clients include the American Automobile Association, TECO Energy and Pan Am.

Susan C. Lohuis, vice president, is client contact.

### Hammond and Hammond

*350-106th Ave. N.E., Bellevue, Wash. 98004; (206) 451-2600*

Hammond and Hammond, a subsidiary of Dean Witter Reynolds Inc., provides development of investment policies and objectives; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

The firm provides manager evaluation searches and investment management research to the investment management industry.

The firm has special expertise in manager evaluation.

There are 45 corporate retainer clients.

There are three professional consultants. Fees are payable in hard and soft dollars.

Craig Hammond, vice president-investments, is client contact.

### Harrell, Cooper & Associates

*12377 Merit Drive, Dallas, Texas 75251; (214) 934-7811*

Harrell, Cooper & Associates Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers FASB 87 analysis and funding policy.

The firm has special expertise in asset allocation and equity manager selection.

The firm began business in August.

There are three professional consultants. Fees are payable in hard dollars.

Guy M. Cooper, president, is client contact.

### B. Hauptman & Associates

*58 E. Burlington, Fairfield, Iowa 52556; (515) 472-8581*

B. Hauptman & Associates Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. performance measurement.

The firm has special expertise in hedge funds and alternate fixed-income vehicles.

Significant developments at the firm in the past year are the completion of in-depth research on hedge funds and private investment partnerships.

Of the 75 clients on retainer, 12 are corporate, 60 are public and three are union.

There are three professional consultants. Fees are payable in hard and soft dollars.

The firm offers the GAIN Investment Manager Program, which allows investors with small amounts to invest access to managers with high minimum account requirements.

Bruce Hauptman is client contact.

### Hewitt Associates

*100 Half Day Road, Lincolnshire, Ill. 60015; (312) 295-5000*

Hewitt Associates provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers real estate and venture capital investment consulting, asset/liability modeling and insurance contract analysis and selection.

The firm has special expertise in the above, as well as in the integration of pension assets and liabilities.

Significant changes or developments at the firm in the past year include a complete revision and updating of its performance evaluation system.

Of the 50 clients on retainer, 40 are corporate, one is public, two are union and seven are in other institutional categories. The firm also provided services to 50 non-retainer clients during the past year, of which 40 were corporate and 10 were in other institutional categories.

There are 12 professional consultants. Fees are payable in hard and soft dollars.

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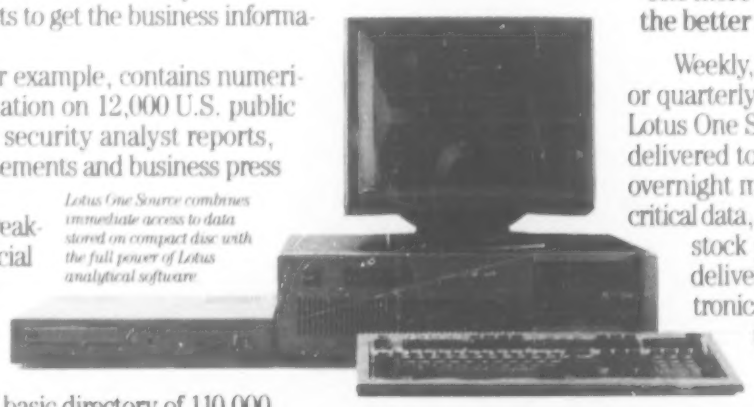

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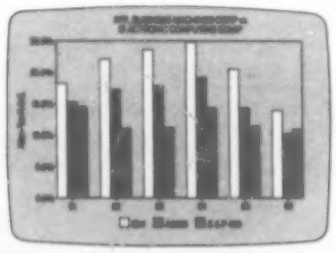

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AHA Investment Funds, a multiportfolio mutual fund designed for member hospitals of the American Hospital Association.

Clients include AMP, Adolph Coors, Southland and Upjohn.

Ronald Jones, partner, is the client contact.

### Holbein Associates

*17636 Windflower, Suite 100, Dallas, Texas 75252; (214) 380-9246*

Holbein Associates Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers multiple manager fit analysis, pro forma pension plan liability and funded status analysis and pro forma FASB 87 analysis.

The firm has special expertise in pension asset/liability projection and manager selection, including multiple manager diversification and fit analysis.

There is one professional consultant. Fees are payable in hard and soft dollars.

Clients include Club Corporation of America, Teacher Retirement System of Texas, Texas County and District Retirement System and Tracor.

Richard Holbein, president, is client contact.

### Hopewell Rembert Advisors

*7647 Leesburg Pike, Falls Church, Va. 22043; (703) 821-6655*

Hopewell Rembert Advisors Inc. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

The firm has special expertise in in working with institutions with less than $20 million.

There are 20 corporate clients on retainer.

There are two professional consultants. Fees are payable in hard and soft dollars.

Clients include Hoven Corp., Lube Inc. and C.P. Brown.

H.L. Hopewell is the client contact.

### K.H. Hueler Inc.

*7460 Market Place Drive, Minneapolis, Minn. 55344; (612) 941-5351*

K.H. Hueler Inc. provides development of guaranteed investment contract investment policies and objectives and GIC manager evaluation and selection.

The firm provides three levels of service: contract placement; alternative product evaluation; and GIC manager search and selection services.

Significant developments at the firm in the past year include a quarterly seminar addressing changes in the GIC market. The firm also developed a system for evaluating pooled GIC funds.

There is one corporate retainer client. The firm also provided services to nine corporate non-retainer clients during the past year.

There are two professional consultants. Fees are payable in hard and soft dollars.

Clients include Super Valu Stores.

Carol Lenhart, manager-treasury operations, is client contact.

### INDATA

*High Ridge Park, Building 5, Stamford, Conn. 06905; (203) 329-6100*

INDATA, a service of Gordon, Haskett & Co., provides U.S. and foreign investment performance measurement and analysis.

The firm offers IMS Investment Management System, a comprehensive portfolio management, performance measurement and security analysis system for microcomputer and local area networks, to the investment management industry.

The firm has special expertise in weekly comparative performance measurement, attribution analysis and evaluation.

Significant changes or developments at the firm in the past year include the addition of monitoring of international and fixed-income portfolios in both U.S. and local currencies.

Of the 650 clients on retainer, 34 are corporate, 18 are public, two are union and 596 are money managers.

There is one professional consultant. Fees are payable in hard and soft dollars.

Steven N. Johnson, director of marketing, is the client contact.

### Institutional Fund Consultants Inc.

*2423 American Lane, Madison, Wis. 53704; (608) 244-3541*

Institutional Fund Consultants Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers master trust/custodian bank evaluation and selection, defined contribution plan investment consulting and retainer consulting.

The firm provides performance measurement to the investment management industry.

Of the 21 clients on retainer, 20 are corporate and one is union. The firm also provided services to 16 corporate non-retainer clients during the past year.

There are two professional consultants. Fees are payable in hard and soft dollars.

Gordon L. King, president, and Kathleen A. Crowley, vice president, are client contacts.

### Institutional Property Consultants Inc.

*7 Piedmont Center, Suite 715, Atlanta, Ga. 30305; (404) 261-8049*

Institutional Property Consultants Inc. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

The firm provides the COMPARE Performance Reporting System to the investment management industry.

Its special expertise is in its detailed data base and that all its consultants are real estate professionals.

Significant changes or developments at the firm in the past year include the addition of two consultants.

Of the 30 clients on retainer, 11 are corporate and 19 are public.

There are six professional consultants. Fees are payable in hard dollars.

Clients include Cargill, The Common Fund, California State Teachers and New York State Teachers.

Principals, Paul H. Saylor in Atlanta and Barbara R. Cambon in San Diego at (619) 458-1120, are client contacts.

### InterSec Research Corp.

*48 Signal Road, Stamford, Conn. 06902; (203) 348-7101*

InterSec Research Corp. provides development of investment policies, objectives and asset allocation; foreign manager evaluation and selection; and foreign performance measurement and analysis.

The firm also offers foreign pension fund analysis.

The firm offers the following to the investment management industry: multinational portfolio performance measurement and analysis; strategic planning; multicurrency portfolio accounting software systems; and global pension asset studies and data bases.

The firm has special expertise in all aspects of the transnationalization of investment assets, manager selec-


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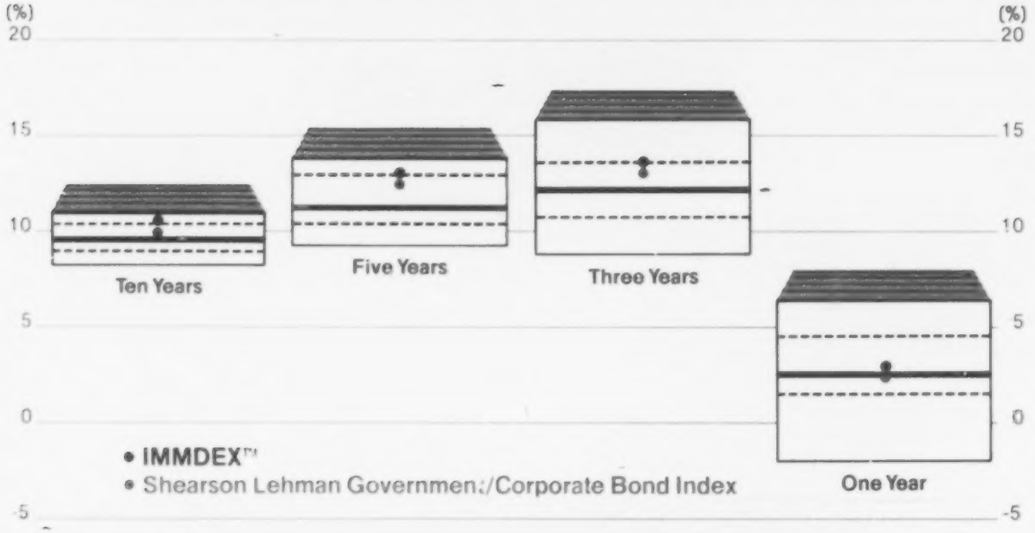


Bond fund total rates of return for periods ended December 31, 1987. Source SEI.

**The Shearson Lehman Government/Corporate Bond Index has provided superior performance when compared to active fixed income managers. The Index has consistently provided first or strong second quartile returns over most time periods.**

**Immdex is a unique bond management system in which the annual return will match or exceed the index rate of return. On the basis of actual experience, IMMDEX has added an average of 65 basis points of excess annual return to the Shearson Lehman Government/ Corporate Bond Index.**

**Immdex accomplishes this objective through two strategies:**

- **The index rate of return is achieved through a proprietary duration-matching strategy.**
- **Immdex capitalizes on market opportunities to further enhance total return.**

**First Wisconsin Trust Company is a leader in the area of quantitative fixed income management and we believe that the Immdex advantage will prove to be an attractive alternative to your current bond management approach.**

**Let us review how Immdex provides positive tracking to the Shearson Lehman Government/ Corporate Bond Index and enhanced market returns through the use of bond management techniques. Call Robert Aubrecht at (414) 765-4906 or Charles Groeschell at (414) 765-4789 or write First Wisconsin Trust Company, First Wisconsin Center, Box 2054, Milwaukee, Wisconsin 53201.**

FIRST WISCONSIN TRUST COMPANY

tion, research and evaluation.

Significant developments at the firm in the past year include the expansion of its London and Tokyo offices, and the introduction of an Australian pension performance measurement service and universe.

Of the 28 clients on retainer, 23 are corporate and five are public. The firm provided services to 12 non-retainer clients during the past year, of which 10 were corporate and two were public.

There are 18 professional consultants. Fees are payable in hard and soft dollars.

Clients include Arizona Public Service, H.J. Heinz, Owens Illinois and Air Canada.

Christopher A. Nowakowski, president, is client contact.

### The Investment Guild

*255 Yorkland Blvd., Suite 201, Willowdale, Ontario M2J 1S3; (416) 499-4933*

The Investment Guild provides development of investment policies, objectives and asset allocation.

The firm has special expertise in pension planning.

Of the five clients on retainer, three are corporate, one is public and one is union. The firm also provided services to 10 corporate non-retainer clients during the past year.

There are four professional consultants. Fees are payable in hard dollars.

Mike Thomas, vice president, is client contact.

### Investment Management Inc.

*2700 E. 51st St., Suite 340, Tulsa, Okla. 74105; (918) 742-3031*

Investment Management Inc., a subsidiary of Rubottom Dudash & Associates Inc., provides development of investment policies, objectives and asset allocation and U.S. manager evaluation and selection.

The firm also provides portfolio management and investment research, as well as ESOP evaluations.

There are 20 corporate clients on retainer. The firm also provided services to 11 corporate non-retainer clients during the past year.

There are two professional consultants. Fees are payable in hard dollars.

Donald J. Rubottom, president, is client contact.

### Investment Management Consulting Group

*1 S.W. Columbia, Suite 1400, Portland, Ore. 97258; (503) 241-7558*

Investment Management Consulting Group, a subsidiary of Dain Bosworth, provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; U.S. and foreign performance measurement; and U.S. performance analysis.

The firm has special expertise using a style-associated data base and provides tactical asset allocation.

In late 1987, the firm became affiliated with Performance Analytics and now uses its data base for all search and evaluation activities.

Of the 60 clients on retainer, 58 are corporate and two are union. The firm also provided services to six corporate non-retainer clients during the past year.

There are three professional consultants. Fees are payable in hard and soft dollars.

Clients include Cascade Utilities, Ochoco Lumber and the Oregon District Foundry.

Tony Americh is client contact.

### Investment Management Controls

*River Park-1 West, 800 Connecticut Ave., Norwalk, Conn. 06854; (203) 852-9358*

Investment Management Controls, a subsidiary of Janney Montgomery Scott Inc., provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

Significant changes or developments at the firm in the past year include the establishment of a Dallas office.

Of the 28 clients on retainer, 21 are corporate, two are public and five are endowments.

There are seven professional consultants. Fees are payable in hard and soft dollars.

Clients include Martin Marietta, BOC Group, Foxboro and the City of Fort Worth.

Lillian C. Jones, director of marketing and client relations, is client contact.

### Iona Investment Corp.

*475 Selby Lane, Atherton, Calif. 94025; (415) 322-8312*

Iona Investment Co. provides common stock selection and tactical asset allocation to the investment management industry.

The firm has special expertise in quantitative methods.

The firm, which is new, has two professional consultants. Fees are payable in hard dollars.

George A. Butler, president, is client contact.

## j

### J&L Investment Services

*28570 Marguerite Parkway, Suite 201, Mission Viejo, Calif. 92692; (714) 364-5000*

J&L Investment Services Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers cost-contained 401(k) packages.

It provides economic and market research and market-timing services to the investment management industry.

The firm has special expertise in investment manager selection and 401(k) programs.

Significant developments in the past year include the hiring of two consultants.

Of the 15 clients on retainer, 14 are corporate and one is public. The firm provided services to 30 corporate non-retainer clients during the past year.

There are four professional consultants. Fees are payable in hard and soft dollars.

Clients include GTI, Pomona First Federal Savings & Loan, Healthwest Foundation and Adams Rite.

Thomas C. Jones, president, is client contact.

## k

### Ronald A. Karp Associates

*47 Maple St., Summit, N.J. 07901; (201) 522-1414*

Ronald A. Karp Associates Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. performance measurement and analysis.

The firm has special expertise in real estate, asset allocation, international investments and insurance contract negotiations.

Significant changes at the firm in the past year are the development of a computerized real estate data base and a sophisticated real estate fee model.

Of the 12 clients on retainer, seven are corporate, four are public and one is union. The firm also provided ser-

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vices to 10 non-retainer clients during the past year, of which seven were corporate and three were public.

There are three professional consultants. Fees are payable in hard and soft dollars.

Clients include Pennsylvania State Employees, Los Angeles Fire and Police, Saatchi & Saatchi Holdings and Ohio School Employees.

Ronald A. Karp, president, is client contact.

### Kauffman & Drebing

*230 S. Broad St., Philadelphia, Pa. 19102; (215) 546-8016*

Kauffman & Drebing provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

There are two professional consultants. Fees are payable in hard dollars.

Neil B. Kauffman is client contact.

### W.T. Kennedy Inc.

*300 W. Peachtree St., Suite 10G, Atlanta, Ga. 30308; (404) 523-8500*

W.T. Kennedy Inc. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers staff educational training and manager selection presentations directly to the client board of trustees.

Through the INDATA universe, the firm offers risk/reward analysis and rankings, and customized universes of performance comparison for peer group risk/reward quartiles to the investment management industry.

The firm has special expertise in manager selection, monitoring, performance analysis and attribution analysis.

Of the 17 clients on retainer, 12 are corporate, three are public and two are union. The firm also provided services to 26 non-retainer clients during the past year, of which 18 were corporate, six were public and two were union.

There is one professional consultant. Fees are payable in hard and soft dollars.

William T. Kennedy, president, is client contact.

### Kidder Peabody's PRIME Consulting Group

*20 Exchange Place, New York, N.Y. 10005; (212) 510-5089*

Kidder Peabody's PRIME Consulting Group, a subsidiary of Kidder Peabody, provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

The firm has expertise in asset allocation and policy determination.

Of the 125 clients on retainer, 100 are corporate, 20 are public and five are union. The firm also provided services to 200 non-retainer clients during the past year, of which 180 were corporate and 20 were public.

There are six professional consultants. Fees are payable in hard and soft dollars.

Natalka Bukalo is the client contact.

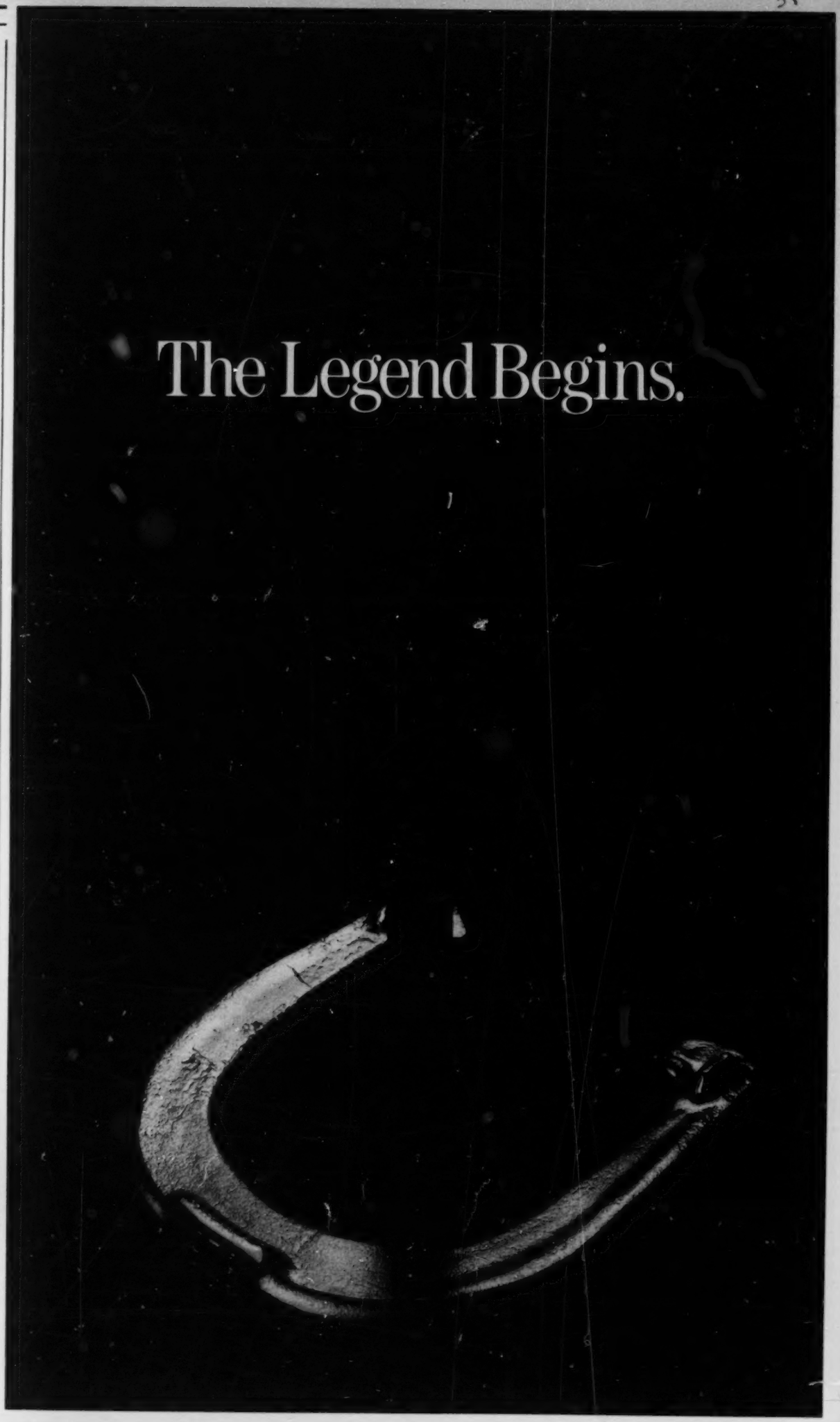
I

### Laventhol & Horwath

*1845 Walnut St., Philadelphia, Pa. 19103; (215) 299-1700*

Laventhol & Horwath provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and

*Pensions & Investment Age's* book of lists: Dec. 26.



analysis.

The firm also offers real estate portfolio analysis, real estate acquisition/disposition due diligence, construction consulting and appraisals.

The firm provides the following to the investment management industry: acquisitions/dispositions due diligence, appraisals, construction consulting, and tax and accounting assistance.

The firm has special expertise in real estate investment consulting.

Of the six clients on retainer, two are corporate, two are public and two are union. The firm also provided services to five non-retainer clients during the past year, of which one was corporate, three were public and one was union.

Fees are payable in hard dollars.

Clients include Allied-Signal, Minnesota State Board; Joint Industry Board of the Electrical Industry and the Development Foundation of Southern California.

J. Richard Rosenberg, director of real estate pension advisory services, is client contact.

### Lehrer Development and Investments

*555 Del Monte Drive, Suite 802, Houston, Texas 77056-4105; (713) 552-1442*

Lehrer Development and Investments provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

The firm also offers real estate financial analysis, due diligence reports, institutional documentations, market and feasibility analysis, and corporate finance and real estate business plans.

The firm provides real estate, banking, finance and urban economic reports, studies and analysis projects to the investment management industry.

The firm has special expertise in urban economics and banking and finance.

The firm has four corporate retainer clients. The firm provided services to 15 non-retainer clients during the past year, of which 11 were corporate and four were public.

There are two professional consultants. Fees are payable in hard dollars.

Clients include Curtis International, Federal Home Loan Bank, Kaplan Management and Mortgage Government Securities.

Kenneth Eugene Lehrer, managing partner, is client contact.

### Lewis Bailey Associates Inc.

*1 Financial Center, Boston, Mass. 02111; (617) 439-3232*

Lewis Bailey Associates Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm provides extensive investment and financial planning research reports.

It has special expertise in financial and investment planning for corporate pension plans and large family groups, and provides extensive coverage of non-traditional assets.

There are 20 corporate retainer clients.

The firm is affiliated with Cambridge Associates, which handles non-profit organizations.

There are 20 professional consultants. Fees are payable in hard and soft dollars.

Clients include Blue Cross of Florida, Hewlett-Packard, 3M and World Bank.

David B. Thurston is client contact.

### Lipper Consulting Services

*69 New England Ave., Summit, N.J. 07726; (201) 273-4488*

Lipper Consulting Services provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers mutual funds and closed-end investment companies selection and strategy formulation.

The firm publishes 10 reports for the investment management industry on fund performance, portfolio characteristics, fund fee and expense analysis, the brokerage industry and convertible securities.

The firm has special expertise in mutual funds and closed-end investment companies. An affiliate tracks the performance of more than 4,000 domestic and international investment companies, evaluates their portfolios and analyzes related data.

There are five retainer clients. Services also were provided to 10 non-retainer clients during the past year.

There are three professional consultants. Fees are payable in hard and soft dollars.

Lipper Advisory Services Inc., an affiliate, is a registered investment adviser providing investment management services to pension funds, endowments and foundations.

Henry Shilling, director of marketing, is client contact.

### Loewi Managed Account Services Inc.

*111 E. Kilbourn Ave., Milwaukee, Wis. 53202; (414) 347-3360*

Loewi Managed Account Services Inc., a subsidiary of Blunt Ellis & Loewi Inc., provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

The firm also offers accounting and audit services.

It has special expertise in risk evaluation.

The firm provided services to 100 non-retainer clients during the past year, of which 30 were corporate, 60 were public and 10 were union. The firm has established a long-term, non-retainer consulting relationship with 65 of the clients listed above.

There are three professional consultants. Fees are payable in hard and soft dollars.

Thomas M. Trebby, vice president, is client contact.

### Lowry Consulting Group Inc.

*2859 Paces Ferry Road, Suite 1900, Atlanta, Ga. 30339; (401) 431-1110*

Lowry Consulting Group Inc., a subsidiary of Wm. W. Lowry & Associates Inc., provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers a system that tests clients' actuarial policies and pension investment strategies to determine their impact on earnings per share under FASB 87.

The firm has special expertise in asset allocation, manager selection and in a cost reduction methodology using the integration of actuarial and investment policies while measuring complementary investment styles and performance over long periods.

Significant changes at the firm in the past year include the adoption of a new name, a new president and chief financial officer, and the presence of USF&G as a minority stockholder.

Of the 76 clients on retainer, 70 are corporate, three are public and three are union.

There are 10 professional consultants. Fees are payable in hard and soft dollars.

Clients include USF&G, Black & Decker Manufacturing, Emerson Electric and Potomac Electric Power.

Michael T. Wilkinson, president, is the client contact.

m

### Managed Portfolio Research

*11444 W. Olympic Blvd., 10th Floor, Los Angeles, Calif. 90064-1544; (213) 312-9598*

Managed Portfolio Research Inc., a subsidiary of Investment Account Services Corp., provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; U.S. and foreign performance measurement; and U.S. investment performance analysis.

The firm also offers monthly monitoring statements; 401(k) and other qualified plan services; and a "broad range" — under 404(c) — of professional investment management through a bank collective trust.

The firm has special expertise in ERISA and using the law's criteria to set up a prudent investment process.

There is one professional consultant. Fees are payable in hard and soft dollars.

John A. Martin, president, is client contact.

### Marquette Associates Inc.

*Quaker Tower, Chicago, Ill. 60610; (312) 527-5500*

Marquette Associates Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers 401(k) plan development and investment review.

The firm has special expertise in insurance company investments, health-care company retirement plans and corporate plans.

Of the 24 clients on retainer, 21 are corporate, two are public and one is union.

There are three professional consultants. Fees are payable in hard dollars.

Brien O'Brien, president, is client contact.

### James P. Marshall Inc.

*10 King St. E., 10th Floor, Toronto, Ontario M5C 1C3; (416) 361-0225*

James P. Marshall Inc. provides development of investment policies, objectives and asset allocation; Canadian manager evaluation and selection; and Canadian performance measurement and analysis.

The firm has special expertise in Canadian money managers; strategic, long-term asset mix policy planning; formulation of investment policies; performance measurement and analysis; and analysis of Canadian and U.S. accounting rules for pension plans.

Significant developments at the firm in the past year include the opening of an office in Regina, Saskatchewan.

There are 16 clients on retainer. The firm also provided services to 30 non-retainer clients during the past year, of which 25 were corporate, three were public and two were union.

There are four professional consultants. Fees are payable in hard dollars.

Andrew N. Smith, partner, is client contact.

### James Meketa Associates

*1 Monarch Drive, North Quincy, Mass. 02171; (617) 964-0375*

James Meketa Associates Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers negotiation of manager, custodian and broker fees; custodian selection; corporate plan reversions; and asset/liability modeling.

The firm has special expertise in multimanager plan coordination and development.

Of the 16 clients on retainer, seven are corporate, five are union and four are endowment. The firm also provided services to 10 non-retainer clients during the past year, of which nine were corporate and one was union.

There are four professional consultants. Fees are payable in hard dollars.

Clients include Northwest Airlines, Ohio Carpenters, Ohio Laborers and Massachusetts Savings Bank Employees.

John A. Denney, vice president, is client contact.

### Mellon Bank

*1 Mellon Bank Center, Pittsburgh, Pa. 15258-0001; (412) 234-5551*

Mellon Bank provides development of investment policies, objectives and asset allocation; U.S. manager evaluation; and U.S. and foreign performance measurement and analysis.

The bank also offers on-line data access and customized performance reports.

It provides performance information

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to the investment management industry.

Significant developments in the past year include enhancement of the performance measurement system and expansion of its financial data bases.

Of the 60 clients on retainer, 56 are corporate, three are public and one is union.

There are four professional consultants. Fees are payable in hard dollars.

Mary E. McFadden is client contact.

### William M. Mercer Meidinger Hansen Inc.

*1417 Lake Cook Road, Deerfield, Ill. 60015; (312) 948-7400*

William M. Mercer Meidinger Hansen Inc., a subsidiary of Marsh & McLennan, provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers transaction cost evaluation (evaluation of U.S. managers' trading effectiveness) and asset/liability modeling.

The firm has special expertise in asset/liability modeling, international manager selection and transaction cost evaluation.

Significant developments in the past year are the development of a PC-based asset and liability modeling system and the transaction cost evaluation service.

Of the 150 clients on retainer, 70 are corporate, 30 are public, 20 are union and 30 other institutional operating funds. The firm also provided services to 450 non-retainer clients during the past year, of which 250 were corporate, 75 were public, 50 were union and 75 others.

There are 100 professional consultants. Fees are payable in hard and soft dollars.

Clients include Arizona, Arthur Andersen, Ralston Purina and the Major League Baseball Players Association.

S.A. Lincoln, managing director, is client contact.

### Merrill Lynch Consulting Services

*717 Fifth Ave., New York, N.Y. 10022; (212) 415-7978*

Merrill Lynch Consulting Services, a subsidiary of Merrill Lynch, provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; U.S. and foreign investment performance measurement; and U.S. performance analysis.

The firm has special expertise in on-going consulting relationships through its Asset Information and Measurement Service — its performance analysis service.

Significant developments in the past year include the introduction of the Merrill Lynch Consults Service, which combines many services in a single product package.

The firm provided services to 600 non-retainer clients during the past year, of which 200 were corporate, 100 were public, 100 were union and 200 were endowments.

There are 25 professional consultants. Fees are payable in hard and soft dollars.

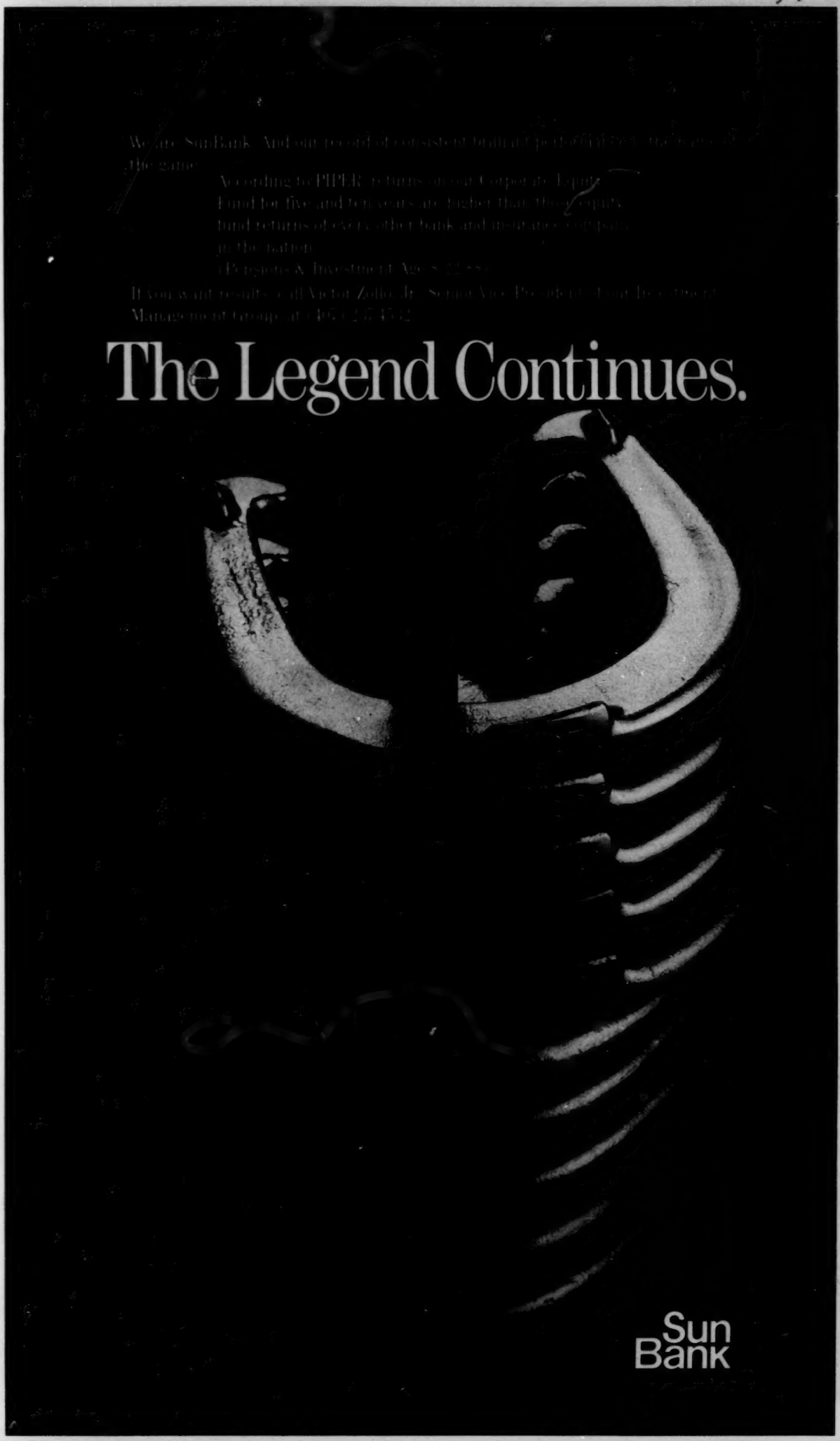
David T. Ferrier, vice president, is the client contact.

### Money Manager Consulting Group

*10900 N.E. 4th St., Suite 1400, Bellevue, Wash. 98004; (206) 462-5050*

Money Manager Consulting Group, a subsidiary of Dain Bosworth Inc., provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

The firm provides the following to the investment management industry: custodianship, ERISA plan designs, securities executions, manager selection



and monitoring.

The firm has special expertise in working with plans of less than $10 million, performance monitoring and manager selection.

Significant developments in the past year include the implementation of a wrap fee, which includes the manager's fee and the consultant's fee.

Of the 240 clients on retainer, 30 are corporate, 209 are public and one is union.

There are five professional consultants. Fees are payable in hard and soft dollars.

Clients include Analytical Methods, Blake Sand and Gravel, Puget Sound Electrical Workers and Spoelstra Brothers.

Thomas Wede and Andre Kamber, managing principals, are the client contacts.

### Monitoring and Evaluation Services Inc.

*3375 Park Ave., Suite 3006, Wantagh, N.Y. 11793; (516) 781-2000*

Monitoring and Evaluation Services Inc. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

The firm provides research relating to market trends and events that may influence performance to the investment management industry.

The firm has special expertise in computer-generated performance reports with emphasis on color graphics at the request of clients between normal quarter annual reporting periods.

Of the nine clients on retainer, one is public and eight are union. The firm also provided services to five non-retainer clients during the past year, of which one was public and four were union.

There are two professional consultants. Fees are payable in soft dollars.

Clients include New York City Detectives Endowment Association, New York City Uniformed Fire Officers Local 854 and the New York City Housing Patrolmen's Benevolent Association and Superior Officers.

John T. Renck is client contact.

### Morgan Keegan & Co. Inc.

*50 N. Front St., Memphis, Tenn. 38103, (901) 529-3797*

Morgan Keegan & Co. Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. performance measurement and analysis.

The firm also offers pension plan design, installation and administration.

It provides equity and fixed-income research, in addition to performance measurement evaluation to the investment management industry.

The firm has special expertise in performance measurement and manager evaluation and selection.

Of the nine clients on retainer, eight are corporate and one is union. The firm also provided services to 147 non-retainer clients during the past year, of which 121 were corporate, five were public, 12 were union and nine were foundations and endowments.

There are seven professional consultants. Fees are payable in hard and soft dollars.

J. Blake Taylor, vice president, is client contact.

n

### New England Pension Consultants Inc.

*Church Green, 101 Summer St., Boston, Mass. 02110; (617) 348-2950*

New England Pension Consultants Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers assistance with structured portfolios, FASB 87 asset/liability matching, derivative instruments and public and Taft-Hartley fund services.

Of the 45 clients on retainer, 11 are corporate, nine are public, 14 are union and 11 are endowments.

There are four professional consultants. Fees are payable in hard and soft dollars.

Richard M. Charlton is client contact.

o

### The Option Consulting Group Inc.

*17 Madison Ave., Port Chester, N.Y. 10573; (914) 939-1543*

The Option Consulting Group Inc. provides development of investment policies, objectives and asset allocation; and U.S. and foreign performance measurement and analysis.

The firm also offers market simulation research and owns extensive historical stock, option and index data bases and quantitative simulation models for strategy evaluation.

The firm provides historical strategy simulation models and option overwriting and mathematical asset allocation optimizers to the investment management industry.

The firm has special expertise in U.S. stock options and installs high-speed links to client computers for complex real-time trading strategies.

Significant developments in the past year include increased emphasis on optimization strategies and the addition of proprietary global optimization strategies.

There are five corporate clients on retainer. The firm provided services to two non-retainer clients during the past year.

There are five professional consultants. Fees are payable in hard and soft dollars.

The firm licenses four proprietary investment products: option overwriting; currency optimization; global asset optimization; and equity optimization.

Clients include Balch, Hardy & Scheinman and the International Option Investment Trust.

Kurt G. Hiebaum, president, is client contact.

### O'Shaughnessy Capital Management Inc.

*Suite 18F, 740 River Drive, St. Paul, Minn. 55116; (612) 699-2334*

O'Shaughnessy Capital Management Inc. provides asset allocation development. The firm provides monthly and as-needed reviews of its proprietary allocation models' advice for equity-oriented investments; reviews of individual equities on a value and quantitative method; and commentary.

The firm has special expertise in tactical asset allocation strategies for large portfolios.

The firm was formed in March.

There is one professional consultant. Fees are payable in hard dollars.

James P. O'Shaughnessy, president, is client contact.

p

### PaineWebber Inc.

*1285 Avenue of the Americas, New York, N.Y. 10019; (212) 713-2625; 2000 Post Oak Blvd., Suite 120, Houston, Texas 77056; (713) 871-0901*

PaineWebber Inc. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. per-

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formance measurement and analysis.

The firm also offers searches for custodians, plan administrators and actuaries.

It provides performance evaluation and investment adviser searches to the investment management industry.

The firm has special expertise in monitoring performance and conducting adviser searches.

Significant developments in the past year include the development of the PW Trust, which gives clients full trust and administrative services, as well as the benefit of choosing from six independent managers.

Fees are payable in hard and soft dollars.

The firm offers its own investment vehicles involving GICs, U.S. government securities and the PW Trust.

Jennifer Schiffman, vice president, is client contact in New York; Frank Savage, vice president-investments, is client contact in Houston.

The book of lists: Dec. 26.

### Peat Marwick Main & Co.

*345 Park Ave., New York, N.Y. 10154; (212) 872-5973*

Peat Marwick Main & Co., a subsidiary of KPMG Peat Marwick, provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. performance measurement and analysis.

The firm also offers real estate manager evaluation and selection, master trust/custodian evaluation and selection, customized research products and surveys, investment performance attestation and integration of investment and treasury management disciplines.

The firm provides investment performance attestation to the investment management industry.

The firm has special expertise in integrating asset and liability planning; manager searches; and integrating investment and treasury disciplines.

Significant developments in the past year include expansion of the investment supervision group's ties to other areas of the firm, particularly the treasury management and tax departments.

There are 10 professional consultants. Fees are payable in hard and soft dollars.

Clients include Carlisle Cos., Girl Scouts of America, Hitchcock Clinic and San Diego Transport.

Evelyn Morgner, senior manager, is client contact.

### The Peirce Park Group

*2600 W. 7th St., Suite A, Wilmington, Del. 19805; (302) 429-0982*

The Peirce Park Group provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; U.S. performance analysis; and foreign investment performance measurement.

There are three corporate retainer clients. The firm also provided services to 23 non-retainer clients during the past year, of which 19 were corporate and four were foundations.

There are two professional consultants. Fees are payable in hard and soft dollars.

Michael W. Shone, president, is client contact.

### Pension Consulting Alliance

*1435 Gardena Ave., Suite 13, Glendale, Calif. 91204; (818) 240-0372*

Pension Consulting Alliance provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers comprehensive real estate services, divestiture, trading cost analysis and cost control studies and planning.

The firm has special expertise in real estate, international and public pension fund services.

The firm opened July 1, and has provided services to one union non-retainer client.

There is one professional consultant. Fees are payable in hard and soft dollars.

Allan Emkin, president, is client contact.

### Pension Investors Securities

*1180 Spring Centre S. Blvd., Suite 225, Altamonte Springs, Fla. 32714; (407) 869-4233*

Pension Investors Securities Corp. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; U.S. performance measurement; and foreign investment performance measurement.

The firm helps to develop investment policies and asset allocation for small to midsize qualified plans.

The firm has special expertise in multifund investing.

The firm provided services to 240 corporate non-retainer clients during the past year.

There are eight professional consultants. Fees are payable in soft dollars.

Fred A. Forbes, president, is client contact.

### Pension Portfolio Advisors

*25800 Northwestern Highway, P.O. Box 2165, Southfield, Mich. 48037; (313) 357-4125*

Pension Portfolio Advisors, a subsidiary of Maccabees Mutual Life Insurance Co., provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement.

The firm also offers GIC search services.

The firm has special expertise in investment advisory, portfolio management, administrative and custodial services.

Of the 120 clients on retainer, 113 are corporate, four are public and three are union. The firm also provided services to 41 non-retainer clients during the past year, of which 40 were corporate and one was union.

There are seven professional consultants. Fees are payable in hard dollars.

Carole A. Beauchemin, investment marketing consultant, is the client contact in Southfield; Frank R. Novy, vice president, is the client contact in Cleveland at (216) 891-0010.

### Performance Analysis Group

*300 Gem Plaza, Dayton, Ohio 45402; (513) 223-6111*

Performance Analysis Group, a subsidiary of Shearson Lehman Hutton, provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

The firm provides custody and brokerage services to the investment management industry.

The firm has special knowledge of Midwest managers and has expertise in working with clients with less than $5 million.

There are 100 corporate retainer clients.

There is one professional consultant. Fees are payable in soft dollars.

Clients include the Dayton Philharmonic, Tait Foundation and Stop & Go.

William T. Leakas is client contact.

### Performance Analytics Inc.

*30 S. Wacker Drive, Suite 1502, Chicago, Ill. 60606; (312) 930-9560*

Performance Analytics Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers assistance in manager style tilting, through which assets are redirected to undervalued from overvalued styles.

The firm provides performance anal-


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* Pacific Mutual Managed Bond Fund III total annualized rate of return as published by SEI Corp. for periods ending December 31, 1987.

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ysis to the investment management industry.

The firm has special expertise in asset allocation, style tilting and early detection of manager problems.

The firm provided services to 275 non-retainer clients during the past year, of which 165 were corporate, 27 were public and 83 were union.

There are seven professional consultants. Fees are payable in hard and soft dollars.

William G. Lowery, national sales manager, is client contact.

### Portfolio Management Consultants Inc.

*600 17th St., Suite 1735N, Denver, Colo. 80202; (303) 595-0660*

Portfolio Management Consultants Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm has special expertise in asset allocation, manager selection and performance monitoring.

During the past year, the firm has developed products and services for the lower to middle market ($1 million to $10 million).

There are five professional consultants. Fees are payable in hard and soft dollars.

Kenneth S. Phillips, president, is client contact.

### Prudential-Bache Securities Investment Management Consulting Services

*100 Gold St., New York, N.Y. 10038; (212) 406-6110*

Prudential-Bache Securities Investment Management Consulting Services, a subsidiary of Prudential Insurance, provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

The firm has special expertise in in the development of investment policies statements, manager search and selection and investment performance reviews.

Of the 244 clients on retainer, 157 are corporate, 21 are public, 34 are union and 32 are foundations and trusts.

There are 30 professional consultants. Fees are payable in hard and soft dollars.

Clients include BIC Pen, Michigan Milk Producers, Hawaii Laborers and the Archdiocese of San Francisco.

Victor P. Rosasco, senior vice president and national director, and Kathleen W. Ferguson, vice president, are client contacts.

## q

### Quantec/Quantitative Analysis Inc.

*68 Laight St., New York, N.Y. 10013; (212) 925-7224*

Quantec/Quantitative Analysis Inc. provides consulting and software for global asset allocation and portfolio risk analysis.

The firm provides consulting and systems for global investors to the investment management industry. Software products include a global asset allocation service, an international equity risk service, a global portfolio insurance model and a global dividend discount model.

The firm has special expertise in applying quantitative investment techniques to global investments.

Significant changes or developments at the firm in the past year included the opening of a London office.

Of the 50 clients on retainer, five are corporate and 45 are money managers.

There are seven professional consultants. Fees are payable in hard and soft dollars.

Rosanne Pane is client contact.

### QUAN-VEST Consultants

*390 Plandome Road, Manhasset, N.Y. 11030; (516) 365-4619*

QUAN-VEST Consultants Inc. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

The firm also offers tactical asset allocation and long-term asset allocation.

The firm provides computerized analysis of a 1,000-stock universe based on valuation, earnings momentum, technical and composite factors to the investment management industry.

The firm has special expertise in providing multiemployer plans the equivalent of an in-house investment supervision department.

Of the 26 clients on retainer, six are corporate, one is public and 19 are union. The firm also provided services to one corporate non-retainer client during the past year.

There are three professional consultants. Fees are payable in hard and soft dollars.

Clients include National Maritime Union, Uniformed Fire Officers, Textile Workers and Hotel Trades.

Anthony F. Lotruglio is client contact.

## r

### Reed Pension Consulting

*300 E. Carpenter Freeway, Suite 1400, Irving, Texas 75062; (214) 541-1212*

Reed Pension Consulting, a subsidiary of Reed Financial Group Inc., provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

The firm has special expertise in meeting the needs of plans with assets less than $20 million.

Significant developments in the past year include the addition of a computer programmer/analyst and a consultant.

Of the 11 clients on retainer, 10 are corporate and one is union. The firm also provided services to five corporate non-retainer clients during the past year.

There are three professional consultants. Fees are payable in hard and soft dollars.

Peter H. Roe, vice president-pension consulting division, is client contact.

### Richards & Tierney Inc.

*111 W. Jackson Blvd., Chicago, Ill. 60604; (312) 461-1100*

Richards & Tierney Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; U.S. and foreign performance measurement; and U.S. performance analysis.

The firm also offers pension fund performance analysis regarding investment policy, structure, management and strategy.

The firm offers design, construction, maintenance and analysis of benchmarks to the investment management industry.

The firm has special expertise in benchmark portfolios and its Dynamic Completeness Fund.

Significant developments in the past year include the addition of Jeff Bailey as a senior vice president.

Of the 24 retainer clients, 21 are corporate and three are public.

There are three professional consultants. Fees are payable in hard and soft dollars.

Clients include Minnesota, GE, Owens Illinois and RJR Nabisco.

Thomas M. Richards, principal, is client contact.

### Robinson-Humphrey Co. Inc.

*3333 Peachtree Road N.E., Atlanta, Ga. 30326; (404) 266-6120*

The Robinson-Humphrey Co. Inc., a subsidiary of Shearson Lehman Hutton, provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. performance measurement and analysis.

The firm also offers employee benefit plan consultation services, including plan design proposals and installation of prototype plan documents.

It has special expertise in consulting for employee benefit plans and charitable foundations, and qualitative and quantitative analysis of Southeastern-based managers.

Of the 800 non-retainer clients, 700 are corporate and 100 are public.

There are 10 professional consultants.

Fees are payable in hard and soft dollars.

Richard J. Saunders, first vice president, is client contact.

### Rogers, Casey & Barksdale

*29 Federal St., Stamford, Conn. 06901; (203) 356-9400*

Rogers, Casey & Barksdale Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers non-ERISA financial consulting and investment supervision products.

The firm provides the PIPER data base to the investment management industry through Crain Communications Inc.

The firm has special expertise in venture capital research.

During the past year, the firm restructured into RCB International and Rogers, Casey & Barksdale Inc., the former including international investment products and the latter, consulting and U.S. investment products.

Of the 30 clients on retainer, 25 are corporate and five are public. The firm also provided services to six corporate non-retainer clients during the past year.

There are 10 professional consultants. Fees are payable in hard and soft dollars.

The firm offers the special equity group trust; the mutual fund thrift program; and segregated investment programs.

Clients include Gannett, New York state, New York City Teachers and Unisys.

James F. Beasley, chief operating officer, is client contact.

### The Brian Rom Corp.

*860 Fifth Ave., New York, N.Y. 10021; (212) 724-7535*

The Brian Rom Corp. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers consulting on all aspects of South Africa divestiture, including evaluating managers' capabilities to manage South Africa-free portfolios, issues analysis and seminars.

The firm provides analysis of how the performance of individual managers of South Africa-free portfolios compares with the universe of all South Africa-free managers, and offers assistance to managers in marketing South Africa-free services.

The firm has special expertise in setting long-term asset allocation policies and South Africa divestiture.

Significant developments in the past year include the development of a data base of South Africa-free investment firms.

Of the 12 clients on retainer, three are corporate and nine are money managers. The firm also provided services to 16 non-retainer clients during the past year, of which seven were corporate, two were public and seven were endowments and foundations.

There are five professional consultants. Fees are payable in hard and soft dollars.

Clients include Peter J. Schmitt Co. and Rich Products.

Brian M. Rom is client contact.

### Roulac Real Estate Consulting Group

*50 California St., Suite 1300, San Francisco, Calif. 94111; (415) 433-0300*

Roulac Real Estate Consulting Group, a subsidiary of Deloitte Haskins & Sells, provides development of real estate investment policies, objectives and asset allocation; U.S. real estate manager evaluation and selection; and measurement and analysis of U.S. and foreign real estate investment performance.

The firm also offers investment strategy formation, product development, property selection, transaction structuring, due diligence, property valuation and appraisal management services to the investment management industry.

It has special expertise in real estate strategy and policy development; real estate manager selection; property and transaction analysis; and performance measurement.

There are two public retainer clients. The firm also provided services to 50 non-retainer clients during the past year, of which 45 were corporate and five were public.

There are 40 professional consultants. Fees are payable in hard dollars.

Clients include California Public Employees and Texas Teachers.

Jake Young, senior manager, is client contact.

### Rowland-Carmichael

*2813 E. Camelback Road, Suite 400, Phoenix, Ariz. 85016; (602) 955-1540*

Rowland-Carmichael provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm has special expertise in risk management through the use of asset allocation strategies.

Of the 33 clients on retainer, 32 are corporate and one is union.

There are three professional consultants. Fees are payable in hard and soft dollars.

Clients include Tanner Cos., Shamrock Foods, IBEW and Kenley Industries.

Timothy L. Rowland, chairman, is the client contact.

### Frank Russell Co.

*P.O. Box 1454, Tacoma, Wash. 98402; (206) 572-2282*

Frank Russell Co. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers real estate and equity indexes; analytical software; and asset/liability modeling.

Significant current research and development projects include research into the globalization of assets and development of analytical systems and indexes for non-U.S. investments and capital markets.

There are 40 U.S. clients on retainer, including Xerox, AT&T, Chevron and the State of Oregon. The firm has 100 institutional clients overseas.

Russell offers financial services through 11 subsidiaries, including Frank Russell Trust, Frank Russell Securities and Frank Russell Advisors.

Tony Whatley, director of marketing, is client contact.

Public funds will be the subject of a special report in the Nov. 28 issue of *Pensions & Investment Age*.


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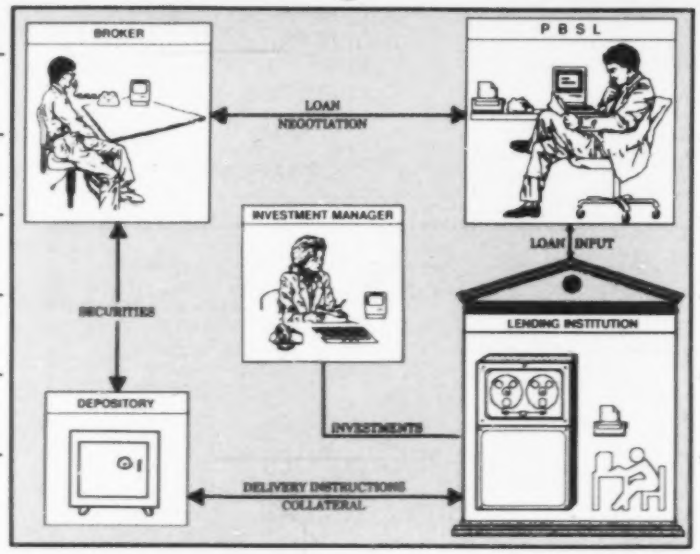


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## S

### Richard Schilffarth & Associates Ltd.

*1201 N. Prospect Ave., Milwaukee, Wis. 53202; (414) 276-4140*

Richard Schilffarth & Associates Ltd. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

The firm provides manager search information and fund analysis/performance reviews to the investment management industry.

It has special expertise in investment manager research. During the past year, the firm developed and introduced the Monitor Funds, a bank collective trust.

There are six professional consultants. Fees are payable in hard and soft dollars.

Raymond C. Krieg, vice president, is the client contact.


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|---|---|
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| 1984-1985 | 1 |

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|---|---|---|
| | 23.5% | 25.2% |

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*CDA Investment Technologies Inc. Rank among 936 managers
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### Segal Advisors Inc.

*730 Fifth Ave., New York, N.Y. 10019; (212) 586-5600*

Segal Advisors Inc., a subsidiary of Martin E. Segal Co., provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers master trust service evaluation and selection, and negotiation of fee and brokerage commission arrangements.

The firm has special expertise in relating investment programs to actuarial characteristics of benefit plans.

Significant developments at the firm in the past year include the addition of staff with particular capabilities in financial analysis.

Of the 60 clients on retainer, three are corporate, four are public, 50 are union and three are foundations. The firm also provided services to 20 non-retainer clients during the past year, of which two were corporate, one was public, 15 were union and two were foundations.

There are seven professional consultants. Fees are payable in hard dollars.

Clients include Wyoming Retirement System, American Cancer Society, National Tea Co. and the Chicago Carpenters' Pension Fund.

Martin Levenson is client contact.

### SEI Corp.

*680 E. Swedesford Road, Wayne, Pa. 19087-1000; (215) 254-1000*

SEI Corp. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers asset/liability planning, real estate consulting, detailed international and global performance evaluation, on-going trading analysis, master trustee evaluation and auditing and special research and development. SEI also will assume fiduciary responsibility for providing full pension administrative and investment support.

The firm provides the following to the investment management industry: domestic and international performance evaluation and consulting, trading cost analysis and consulting and on-going marketing and business consulting.

Significant developments in the past year include the firm's further progress to being a full plan management consultant, and now it will assume fiduciary responsibilities.

Of the 270 clients on retainer, 160 are corporate, 90 are public and 20 are union. The firm also provided services to 1,800 non-retainer clients during the past year, of which 1,000 were corporate, 200 were public, 175 were union and 425 were investment managers.

There are 174 professional consultants. Fees are payable in hard and soft dollars.

Clients include Florida, Halliburton, Massachusetts Bay Transportation and Olin.

Edward D. Loughlin, senior vice president, is client contact.

### Select Benefits Inc.

*100 Dain Tower, Minneapolis, Minn. 55402; (612) 371-2911*

Select Benefits Inc., a subsidiary of Dain Bosworth Inc., provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

The firm also offers participant record-keeping.

Significant developments in the past year include the addition of an experienced investment professional to the staff.

Of the 80 clients on retainer, 75 are corporate, three are public and two are union.

There are three professional consultants. Fees are payable in hard and soft dollars.

Ernest W. Andberg is client contact.

### Sentinel Investment Management Corp.

*34 S. Broadway, White Plains, N.Y. 10601; (914) 683-3970*

Sentinel Investment Management Corp. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

There are two professional consultants. Fees are payable in hard dollars.

Lawrence B. Eichler is client contact.

### Jeffrey Slocum & Associates

*5200 W. 73rd St., Minneapolis, Minn. 55435; (612) 893-1955*

Jeffrey Slocum & Associates Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers custodian bank audits and topical consulting on pension and investment issues.

The firm has special expertise in performance measurement, asset/liability modeling and manager selection.

Of the 33 clients on retainer, 21 are corporate, seven are public and five are union. The firm also provided services to 11 non-retainer clients during the past year, of which nine were corporate, one was public and one, union.

There are three professional consultants. Fees are payable in hard and soft dollars.

Clients include Iowa, Blue Cross and Blue Shield of Minnesota, Cowles Media and the Amherst H. Wilder Foundation.

Jeffrey C. Slocum, president, is client contact.

### Southeastern Advisory Services Inc.

*10 Piedmont Center, Suite 302, Atlanta, Ga. 30305; (404) 237-3156*

Southeastern Advisory Services Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers the design and implementation of plan expense reduction programs.

It has special expertise in manager searches and performance evaluation.

Significant developments in the past year include becoming a registered investment adviser and adding principals Angela Z. Sessler and H. David Stuart III.

The firm has 10 corporate retainer clients. The firm also provided services to 10 non-retainer clients during the past year, of which seven were corporate and three were public.

There are four professional consultants. Fees are payable in hard and soft dollars.

Bishop F. Smith Jr., managing principal, is client contact.

### Southern Plantations Group

*P.O. Box 1683, Albany, Ga. 31702; (912) 439-0012*

Southern Plantations Group Inc. provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement.

The firm offers analysis of specific investments as well as industry analysis, trends and developments in the agricultural and timberland sectors.

The firm provides the following to the investment management industry: agricultural and timberland investments; establishment of objectives, planning and budgeting, acquisition, divestment and management; and management and operations auditing and appraisals.

The firm has special expertise in agricultural, timberland and agribusiness investments.

The firm has 12 corporate retainer clients. It also provided services to four corporate non-retainer clients during the past year.

There are five professional consultants. Fees are payable in hard dollars.

Joseph H. Marshall, president, is client contact.

### Spear Street Advisors Inc.

*100 Spear St., Suite 930, San Francisco, Calif. 94105; (415) 543-6500*

Spear Street Advisors Inc. provides formulation of real estate investment objectives and policies; asset allocation to the real estate asset class, real estate managers and private placement investments; and the development and evaluation of real estate investment strategies. The firm also provides performance measurement and monitoring services at the property, private placement fund, asset manager and the real estate portfolio levels.

Spear Street Advisors also provides specialized services in the areas of private placement fund due diligence; due diligence of direct real estate investment proposals; arranging real estate co-investments between institutional investors; evaluation of secondary offerings involving private placement real estate funds; and focused research in such areas as timberland, developmental land and other specialized real estate concepts.

Focused and specialized investment research services are offered to real estate investment managers.

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management services where non-fiduciary real estate asset managers are involved.

Fees are on a task-related basis for consultant services and a basis-point arrangement for investment advisory services.

As of Sept. 1, the firm had 11 clients, of which four were corporate, five were public, one was union and one was non-profit.

Paul S. Saint-Pierre is client contact.

### Sponsor-Software Systems

*860 Fifth Ave., New York, N.Y. 10021; (212) 724-7535*

Sponsor-Software Systems Inc., a subsidiary of The Brian Rom Corp., provides two PC-based software systems: Asset Allocation Expert, an asset allocation optimization system based on the traditional efficient frontier and incorporating the new below-target variance measure; and FASB Expert, a FASB 87 actuarial-projection system. The firm will provide custom-built software for sponsors and investment firms.

There is one professional consultant. Fees are payable in hard and soft dollars.

Brian M. Rom is client contact.

### Stolper & Co. Inc

*525 B St., Suite 630, San Diego, Calif. 92101-4409; (619) 231-9102*

Stolper & Co. Inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm has special expertise with incentive fee managers.

There are 420 corporate retainer clients.

There are three professional consultants. Fees are payable in hard and soft dollars.

Wilma Engel, consultant, is the client contact.

### Stratford Advisory Group

*120 S. Riverside Plaza, Chicago, Ill. 60606; (312) 902-1985*

Stratford Advisory Group inc. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. performance measurement and analysis.

The firm also offers real estate evaluation, real estate manager selection and strategic asset allocation.

Of the 25 clients on retainer, seven are corporate, one is public, two are union and 15 are endowments and foundations. The firm also provided services to six non-retainer clients during the past year, of which one was corporate, one was public and four were endowments and foundations.

There are six professional consultants. Fees are payable in hard and soft dollars.

Clients include Knight-Ridder, Fairchild Industries, the Carnegie Institute and the Sheet Metal Worker National Pension Fund.

Robert L. Gernstetter, senior consultant, is client contact.

### Theodore Tench & Associates Inc.

*1250 Rogers St., Suite D, Clearwater, Fla. 34616; (813) 443-7199*

Theodore Tench & Associates Inc. provides development of investment policies, objectives and appropriate asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

The firm provides customized quarterly or semiannual investment performance reports to the investment management industry.

The firm has special expertise in analyzing and reporting investment results combining text and graphics.

Significant developments in the past year include staff additions.

Of the 15 clients on retainer, 11 are corporate, two are public and two are union.

There is one professional consultant. Fees are payable in hard dollars.

Clients include Plumbers and Pipefitters Local 624, Florida Millwrights, Morton Pland Hospital and Lamalie Associates.

Theodore Tench, president, is client contact.

### TMSI — Investment Management Consulting Group

*5555 San Felipe, Suite 1000, Houston, Texas 77056; (713) 599-7228*

TMSI — Investment Management Consulting Group, a subsidiary of Thomson McKinnon Securities Inc., provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

The firm also offers design, implementation and cost analysis of nonqualified benefit programs.

The firm has special expertise in risk tolerance, GIC comparisons and life insurance cost analysis.

The firm provided services to 15 non-retainer clients during the past year, of which 14 were corporate and one was public.

There are two professional consultants. Fees are payable in soft dollars.

Clients include Lockwood, Andrews & Newnam, Southcoast Terminals, Palmer-Hastik & Associates, and the Fireman's Relief and Retirement Fund of Texas City.

Robert G. Florance Jr., vice president, is client contact.

### The Townsend Group

*1419 W. Ninth St., Cleveland, Ohio 44113; (216) 781-9090*

The Townsend Group provides development of investment policies, objectives and asset allocation; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

The firm also offers development of investment criteria and property-specific due diligence.

The firm does consulting for real estate assets only.

Of the three clients on retainer, one is corporate and two are public.

The firm provided services to six union non-retainer clients during the past year.

There are three professional consultants. Fees are payable in hard and soft dollars.

Clients include Ohio Police and Firemen's Pension and Disability Fund, Inland Steel Industries, and Chicago Transit Authority.

Kevin W. Lynch and Terrance R. Ahern, principals, are the client contacts.

### TPF&C

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TPF&C, a subsidiary of Towers Perrin, provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers GIC, IPG and annuity consulting.

The firm has special expertise in asset/liability forecasting and insurance contract consulting.

Significant developments at the firm in the past year include the introduction of investment manager search and evaluation capability.

There are 17 professional consultants. Fees are payable in hard and soft dollars.

Roger C. Bransford, national director-asset consulting, is client contact.

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The firm has special expertise in equity, special real estate, manager evaluation and investment partnerships.

Significant developments at the firm in the past year include its acquisition by Lynch Corp.

There is one public retainer client and the firm also provided services to one corporate non-retainer client during the past year.

There are five professional consultants. Fees are payable in hard dollars.

Clients include the Town of Fairfield. Sandra Manzke is client contact.

## V

### Venture Economics Inc.

*16 Laurel Ave., P.O. Box 81348, Wellesley Hills, Mass. 02181; (617) 431-8100*

Venture Economics Inc. provides development of investment policies and objectives; U.S. manager evaluation and selection; and U.S. performance measurement and analysis.

The firm also provides consulting to refine investment criteria, research support, screening proprietary data bases and aggregate portfolio reports with industry benchmarks on investment status and performance. A separate service offers performance measurement guidelines for venture capital funds.

The firm provides manager directories, portfolio analysis and performance research to the investment management industry.

The firm has special expertise in venture capital and leveraged buy-out investing.

Fees are payable in hard and soft dollars.

Linda Vincent, vice president, and Ted Clark, associate, are client contacts.

## W

### Washington, Hackett, Smith

*147 Carondelet St., Suite 1125, New Orleans, La. 70130; (504) 865-1118*

Washington, Hackett, Smith & Co. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers minority and women-owned investment manager evaluation and selection; implementation of minority and local investment manager "farm teams"; planning and implementation of affirmative action policies and legislation with regard to investment management.

The firm has special expertise in minority and women-owned manager evaluation, search and monitoring.

The firm, which is less than a year old, gained one retainer client, the Louisiana treasurer's office.

The firm also provided services to two public non-retainer clients during the past year.

There are three professional consultants. Fees are payable in hard and soft dollars.

Christian M. Washington is client contact.

### Wilshire Associates

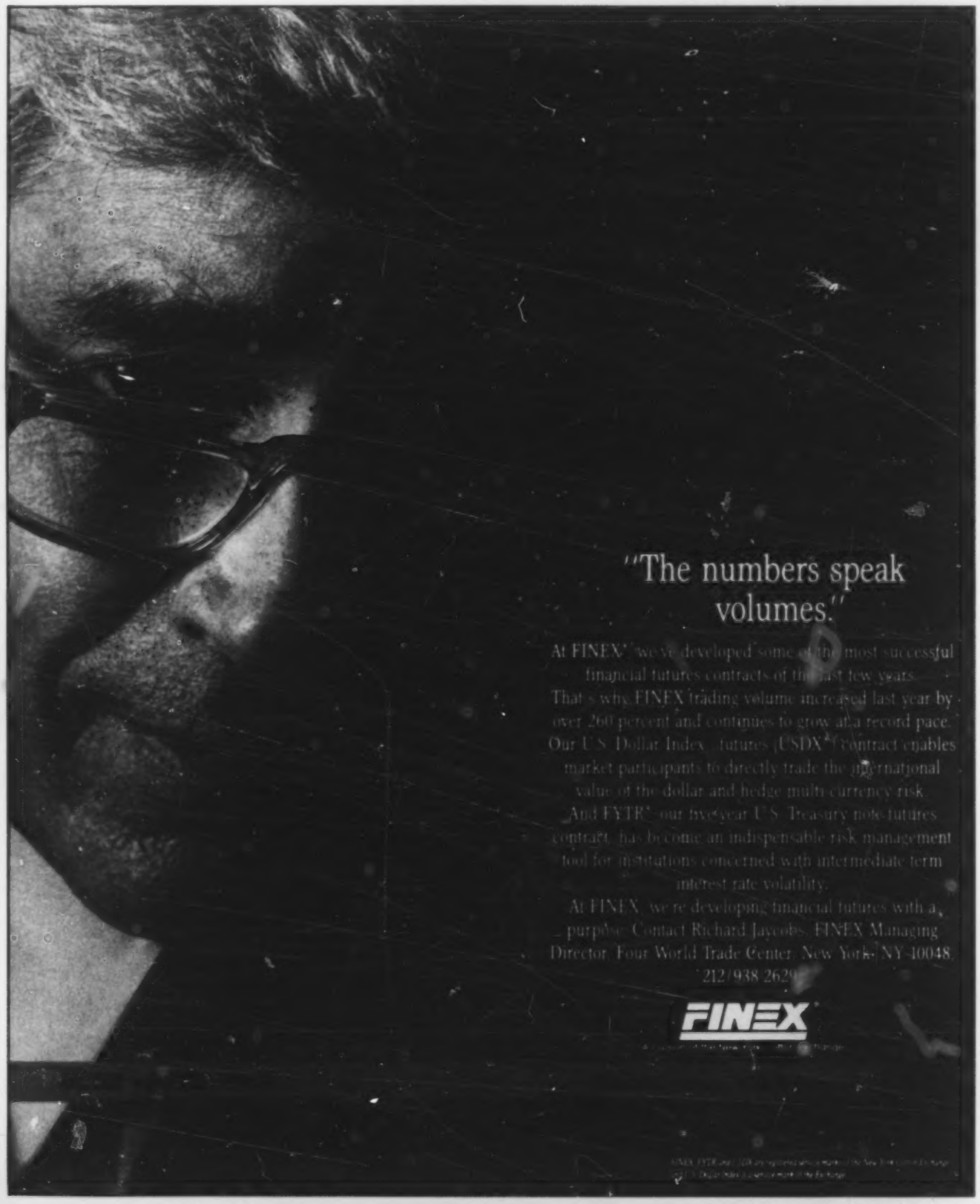
*1299 Ocean Ave., Santa Monica, Calif. 90401; (213) 451-3051*

Wilshire Associates provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers investment structure analysis, real estate consulting, transaction and trading analysis, special investments selection and monitoring (including venture capital, leveraged buy-outs and turnarounds) and cost reduction programs.

It offers the following to the investment management industry: asset allocation, equity management systems, fixed-income management systems, accounting, performance measurement and analysis, universal comparisons and client reporting systems.

Developments at the firm in the past

year are major additions to the consultant senior support staff and enhancement of its international data base and performance evaluation capability.

Of the 73 clients on retainer, 39 are corporate, 22 are public and 12 are endowments and foundations. The firm also provided services to two non-retainer clients during the past year; one was corporate and one, public.

There are 15 professional consultants. Fees are payable in hard and soft dollars.

The firm runs index funds and growth and value structured portfolios. It does not, however, provide both money management and consulting services to clients.

Clients include Avon Products, CBS Records, California Public Employees and the Pension Benefit Guaranty Corp.

Larry Davanzo, senior vice president, is client contact.

### The World Markets Co. PLC

*375 Park Ave., Suite 3207, New York, N.Y. 10152; (212) 593-4747*

The World Markets Co. PLC, a subsidiary of Bankers Trust Co., provides foreign investment performance measurement and analysis.

The firm provides performance evaluation and investment accounting services to the investment management industry.

The firm has special expertise in attribution analysis for international investments of U.S. pension plans.

Significant developments in the past year include the introduction of analysis of bond investments.

Of the 54 clients on retainer, 10 are corporate, two are public and 42 are managers and consultants.

Fees are payable in hard and soft dollars.

Linda McPherson, vice president-marketing, and Angela Docherty, client manager, are client contacts.

### Wurts, Johnson & Co.

*1111 Third Ave., Suite 1200, Seattle, Wash. 98101; (206) 622-3700*

Wurts, Johnson & Co. provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers asset allocation and liability studies.

Significant developments at the firm in the past year include the addition of Brian Cathcart, senior vice president, to the staff.

Of the 66 clients on retainer, 45 are corporate, two are public, 12 are union, seven are Taft-Hartley/endowment and insurance clients. The firm also provided services to eight non-retainer clients during the past year, of which six were corporate, one was public and one, union.

There are two professional consultants. Fees are payable in hard and soft dollars.

Clients include Nordstrom, Alaska Airlines, Washington Natural Gas and National Semiconductor.

Mr. Cathcart is client contact.

### Wyatt Asset Services Inc.

*80 William St., Wellesley Hills, Mass. 02181; (617) 237-3900*

Wyatt Asset Services Inc., a subsidiary of The Wyatt Co., provides development of investment policies, objectives and asset allocation; U.S. and foreign manager evaluation and selection; and U.S. and foreign performance measurement and analysis.

The firm also offers asset/liability modeling to determine the impact of different investment policies on pension contributions; modeling and consultation on FASB 87 expense and funded levels; GIC and annuity placements; and master trustee evaluation and searches.

The firm has special expertise in asset/liability modeling, U.S. and foreign performance measurement and GIC and annuity placements.

Of the 54 long-term, non-retainer clients, 49 are corporate, two are public and three are union. The firm also provided services to 34 non-retainer clients during the past year, of which 30 were corporate, two were public and two were union.

There are 15 professional consultants. Fees are payable in hard dollars.

Asghar Alam, practice director, is client contact.

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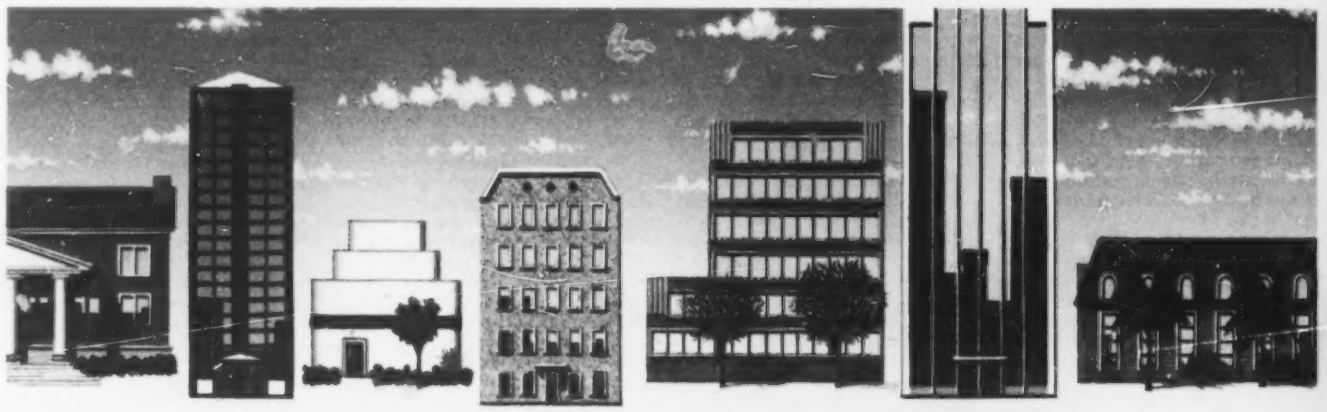

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# International

*Continued from page 17*

performance evaluation work, others — notably Frank Russell — do not.

Two firms with sizable foreign practices declined to disclose figures. A spokeswoman from William M. Mercer Inc., New York, said its foreign actuarial and investment consulting clients are lumped in together, while Roger Bransford, national director-asset consulting for TPF&C, Atlanta, cited concerns about double-counting clients where work is performed out of multiple offices.

The double-counting issue is not unique to TPF&C: InterSec Research Corp., Stamford, Conn., frequently services clients out of more than one office. The firm has 102 retainer clients worldwide, although client data from its foreign offices would suggest a much higher total.

For some consultants, the push abroad started with the need to service U.S. pension clients who were easing into overseas markets a decade ago.

While setting up offices from scratch has led to business from foreign subsidiaries of U.S. multinational corporations that also are domestic clients, penetration of the foreign markets sometimes has proved tough.

The British have a strong financial tradition and have mounted "somewhat of a rear-guard action against American investment technology," said British-born Michael Phillips, Russell's director of consulting activities. Others cite resistance to U.S. fee levels.

The other chief way U.S. firms have achieved foreign market penetration has been through acquisition of foreign firms. William M. Mercer, for example, acquired Duncan C. Fraser & Co., a major London-based actuarial consultant, in 1986 and merged with two Australian firms in 1984 and 1985.

Consultants agreed the competition for foreign clients is heating up. In many countries, actuarial firms have longstanding relationships in which they also have given asset consulting advice. But, the ice is beginning to break in some areas as investors are seeking more sophisticated investment technology.

In Australia, the consulting market opened up after the October crash. "Suddenly, the crash occurred and people were concerned about risk," said Andrew Rudd, president and chief executive officer of BARRA, Berkeley, Calif. BARRA went from zero to 10 Australian clients virtually overnight, he said.

In the United Kingdom, the demand for BARRA's highly quantitative equity models took off following the Big Bang — the deregulation of the British securities markets in 1986 — as British firms scurried for new investment tools, he said.

Still, other markets are tough to pierce for firms making their first showing. The Wyatt Co., with 125 clients in Hong Kong, 70 in the Philippines, 20 in Malaysia, 100 New Zealand and 30 in Australia, probably has "a lock" on that part of the world, said Chris Nowakowski, president of InterSec Research.

Mr. Nowakowski said his firm provides advice to pension executives and financial institutions on the portion of the assets they invest outside of their native countries, with the exception of Japan, where it sells a performance measurement product to Japanese financial institutions.

One important factor boosting actuarial firms is the growing awareness of U.S. multinational corporations that they now must account for the pension liabilities of their foreign subsidiaries under FASB 87, said Asghar Alam, national director of asset services at Wyatt Asset Services Inc., Boston.

Added Sandy Lincoln, managing director of William M. Mercer Meidinger Hansen Inc., Deerfield, Ill.: "To the degree companies try to integrate human resources and financial functions, it works in our favor. To the degree they keep (those functions) separate, it works against us."

Some firms that seek to establish market niches are nonplussed. Russell's Mr. Phillips said efforts by other firms to encourage use of more sophisticated services actually helps his firm, which limits the size of its client list in each market it serves. "It makes our sale easier," he said.

Collins Associates is making its first major run at a foreign market by establishing a relationship with John A. Nolan Associates in Melbourne, Australia. Collins is trying to distinguish itself by being the pre-eminent consultant concerning small specialty managers.

Down the road, some are gazing toward Japan and continental Europe as the brightest lights on the horizon.

According to a recent study by the Organization of Economic Cooperation and Development, benefits levels in OECD countries will have to rise three to four times to meet inflation and demographic needs during the next 25 to 30 years, Mr. Nowakowski said.

The exception is Japan, where benefit levels will have to go up 13 to 14 times, he said. Added to that country's severe level of underfunding of its retirement plans, the indications are for explosive growth in pension assets.

Meanwhile, the Japanese government is moving to loosen investment restrictions on Japanese funds and toughen performance measurement standards. "Japan is far and away the most fascinating pension fund market in the world," Mr. Nowakowski said.

Others also see strong demand for consulting services in continental Europe. Changes in pension laws and investment practices is expected to boost activity in Portugal, Spain and the Netherlands.

In addition, the breakdown of financial barriers in the European Community in 1992 will cause European funds to "look favorably to investing in foreign markets" and to shift away from insurance companies and toward individual stock managers, said Wyatt's Mr. Alam.

Meanwhile, the trend in Canada threatens to go the other way, if proposed legislation shifts employer emphasis toward defined contribution plans, which heavily invest in guaranteed fixed-income products, said Michael McKay, vice president, GBB Buck Consultants Ltd., Toronto. ■

# Funds bypass

*Continued from page 17*

we are seeing is a maturation of a job (the pension plan manager) that didn't even exist 10 years ago."

Leonard S. Chaikind, pension plan administrator at Shell Oil Co., Houston, said he agrees with Mr. Shultz' approach and said "that is exactly what we try to do."

Chaikind

Mr. Chaikind said when new money managers are hired at Shell they also agree to provide "over and above their investment management function" assistance to Shell in managing its overall pension fund.

Shell uses Frank Russell Co. as its consultant but uses its investment managers to provide specialized input either in the form of studies on some aspect of asset management or in meetings to exchange information on trading techniques or special investment processes.

He said money managers provide asset allocation information for Shell and do special studies for the fund. "Since we manage money internally we share information on buying and selling and (money managers) have given us information on how to trade more effectively," he said. "We ask them to be creative."

The disadvantage to using money managers in a consulting role, said Mr. Chaikind, is "you don't have total call on them. With Frank Russell we have total call and they must be very responsive to our needs. The point of using managers is that they can give us specialized information. The Frank Russell people are good but they don't know everything. For example, they have no expertise in GICs and we are big GIC investors," he said.

General Motors Corp. pension executives also use their investment managers to provide consulting assistance and input in directing GM's $30 billion in domestic pension assets.

"We do use our money managers for more than just running their special funds," said Charles Tschampion, director-investment manager relations at GM. "We have a process of internally coordinating and determining our asset allocation and use our managers as a source of financial and market information," he said. GM also uses Frank Russell Co. as its consultant.

Mr. Tschampion said GM views its investment managers "as a resource of investment expertise."

"We pay a fee and we expect to get their thinking and help and the benefit of their understanding. It is a team approach in terms of information gathering and providing input," he said.

Ed Ehrlich, director of the ITT Corp. pension trust, said ITT does not use outside consultants and has "always felt free to use our outside investment managers for input. It (using managers in a consulting role) doesn't sound like anything new or different. We don't use consultants. We've been successful in doing it ourself. We've grown without them and have been in the upper deciles in performance," said Mr. Ehrlich.

Ehrlich

The pension fund of Kerr-McGee Corp., Oklahoma City, used an outside consultant, SEI Funds Evaluation Service, but let it go when fund executives found they didn't need all the data provided by SEI, said H.H. MacPherson, manager investments and financial analysis.

"I'm trying to do more things myself; we're doing more in-house things that consultants couldn't do for us like classifying money managers according to style where the information can be useful. Most consultant classifications don't make any sense. We couldn't get what we wanted from them."

"We used SEI and paid for the service. We got a lot of data, good data on performance and portfolio diagnostics . . . but it was too much and we were paying for data we didn't need," he said.

Roger Bransford, national manager-asset consulting at TPF&C, Atlanta, said the use of investment managers in a consulting role by large pension funds has been an evolutionary process.

"It is due to natural evolution rather than being caused by a specific incident like the market crash. But Oct. 19 and FASB 87 have caused some people to rethink how they manage and view the whole situation." ■

*Pensions & Investment Age* will highlight public funds in the Nov. 28 issue.

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# Hit list

*Continued from page 18*
modating than in the U.K.," said Michael Phillips, director of consulting for Russell. As citizens of a young country, Australians "don't have too many preordained ideas about how things should be done," he said.

When Mr. Nolan neared the end of his 11-year stint with the State Electricity Commission, he and Nolan Director Peter Guy approached Bruce Cook, managing director and chief executive of Mercer Campbell Cook & Knight, the Melbourne-based subsidiary of William M. Mercer.

"We recognized what Nolan was offering as unique," said Mr. Cook. "For a consulting actuarial firm it is almost impossible to recruit top finance people because it'd be difficult to fit them into a salary structure like ours."

Instead, Mercer took a 15% position in the new company and provided office space and support, including access to performance surveys and research.

"We don't see it as a conflict of interests," Mr. Cook said. "Nolan's service is so personalized it's only offered to the top 12 people in the finance industry. It's a Rolls Royce service."

Nolan offers such services as strategic asset allocation and risk-reward portfolio analysis, and customizes them for his clients.

Mr. Nolan also has established ties with Collins Associates. Under a five-year contract, Collins will help Nolan's clients evaluate and select investment managers in the United States and United Kingdom. Nolan provides a reciprocal service for Collins.

Budge Collins, principal of Collins Associates, visited Australia in August, his fourth trip since December, to see clients and prospects. Through Nolan, he has picked up three clients, including the SECV.

Mr. Nolan also serves as the Australian agent for InterSec's range of international investment consulting services, selling InterSec performance measurement services of non-domestic managers on an Australian dollar-denominated basis.

InterSec's first Australian client was the $3.35 billion Superannuation Fund Investment Trust, Canberra.

The firm's client list has doubled to about 27 in the past six months, and includes four of Australia's 10 largest pension funds, said Chris Nowakowski, InterSec's president.

"We researched the market thoroughly and Australian fund managers are upfront about what they want," Mr. Nowakowski said. "The single major shortcoming in the eyes of these clients and prospective clients, at this stage, is that the software does not explicitly capture the impact of currency hedging," he added.

"Australian managers do much more hedging, using futures and options, than any other pension managers worldwide." ■

*Contributed by the Australian Super Review and Foreign Editor Joel Chernoff*

# Groups pulling

*Continued from page 18*
to join the association; for about $475, brokers wishing to become consultants can soon enroll in an IIMC home-study course being prepared in conjunction with academicians, Mr. Johnson said, and earn the title "accredited investment management consultant."

The Certified Investment Management Consultant designation from IIMC is granted, for an additional $200, to those who qualify under eight different levels of practical experience, stressing business with a variety of clients (at least 25) and money managers, with no more than 50% of the required $15 million in assets under consultation managed by the same firm.

"The essence of a consultant is that you are out there doing business with the people in the industry," Mr. Johnson said.

"The purpose is to identify the consultants who have seasoned capabilities — and for those who don't, they can learn most of the basic tools in our organization. They're going to have a mentor," Mr. Bott said.

The IMCA's approach differs in that it offers its "Certified Investment Management Analyst" designation only to those who complete a $3,000, one-week course at the Wharton School.

To enroll, one must have at least three years' experience in investment management or some equivalent combination of graduate course work and investment management.

"We rejected the idea that experience was enough," Mr. Bott said. "We wanted a class that was academically rigorous. You must be qualified before you go through the class," he said.

Perhaps not surprisingly, Mr. Bott is critical of the IMCA's approach.

"There is not easy access (in IMCA) for those who are not highly trained, highly seasoned, to come in," Mr. Bott said. "The elitist approach is not the way to go if the industry is going to grow. I want to see our profession legitimized to the point where it is restrictive, but it won't ever be successful if we shut out people who don't have experience."

Mr. Owen replies: "The other organization is more geared toward the fledgling (consulting) organization," he said. "Is that good or bad? I'm not going to comment. But how do you differentiate someone with 15 years' experience, as opposed to five months' experience?" ■

# $1.5 trillion

*Continued from page 17*
between $600 million and $700 million.

Some do not have a large number of clients. Richards & Tierney — which specializes in benchmark portfolios — has just 24 clients, but those clients have $55 billion in assets. "The type of work that we do has great appeal to very interested and active plan sponsors," said Tom Richards, principal. "They tend to be the larger ones."

Mr. Lincoln attributes some of his firm's size to its acquisitions: "Clearly, we've bought some market share," he said. The firm came out of the merger of William M. Mercer-Meidinger Inc. and A.S. Hansen Inc. in 1987. Since then, it has continued adding to its consulting capacity, with the number of people rising to 120 from 78 in the past several months, he said. This factor also has helped it win and retain business.

Some consultants were unable to provide data on client assets. For instance, one of the larger consulting firms, Hewitt Associates, Lincolnshire, Ill., does not track this data, a spokeswoman said.

Figures are limited to assets of U.S. clients that use the consultant on a retainer or otherwise long-term basis. One firm, Frank Russell, serves another $100 billion of foreign assets. ■

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# Stocks still

–*Continued from page 3*

sitions by the managers running those funds," she said.

Corporate pension funds have lowered their equity exposure to around 50% from a pre-crash high of 57%, according to Steve Einhorn, a partner in Goldman, Sachs & Co., New York.

"It's due to a combination of lower valuations and moderate liquidations," he said. "(It's) less a bearish attitude than selling those shares at a premium."

Liquidation of equities has been the big story since the crash, Mr. Einhorn said.

In the last quarter of 1987, he said, institutional investors were liquidating equities at a $29 billion annualized rate.

In the first quarter of this year, the annualized rate jumped to $37 billion, while in the second quarter, it was at $13 billion.

"Clearly, institutions are being net liquidators," he said. "The amount of liquidation is unusual. Going back to 1968, there has never been a full year of net liquidations."

The main reasons have been leveraged buy-outs, cash mergers and share buybacks, he said.

"Corporations believe the public market prices are below the private market values," Mr. Einhorn said, stressing it was a view with which Goldman doesn't necessarily agree.

The present-day popularity of tactical asset allocation is partly a result of the crash, accelerating structural changes that were under way among institutional investors, according to Eric Sorensen, director of quantitative analysis for Salomon Brothers Inc., New York.

The crash highlighted the tension developing between traditional fundamental analysis and the structural changes, such as the development of derivative strategies and the available liquidity from program trading, he said.

"The structural changes are in place and then you have the (market crash)," he said. "No matter what kind of portfolio diversification you had, you got hammered."

Scudder's Ms. Small also sees growth in the use of tactical asset allocation, which promises a "more conservative" participation in the equity markets.

"Caution is worldwide," she said. "Instead of creating reverberations through the real economy, the crash brought equity investors back to reality. It marked the end, but did not roll back, the 1980s' liquidity-driven bull market."

The end result, according to Sara Teslik, executive director of the Council of Institutional Investors, Washington, which represents 65 pension plans with about $300 billion in assets, is a greater realization on behalf of institutional investors that they can't perform independent of the market as a whole.

"They are much more tuned to look at market cycles, more passive investments," she said.

The shock of the market crash wasn't as powerful as might have been a few years ago, she said, before institutional investors realized their clout. "Now, we are so big we realize we are the market," she said.

For Wyatt's Mr. Scott, the crash should have no long-term impact. "Twenty years from now, when people are getting their pensions for the first time, the crash will have little effect," he said.

"Pension administrators look at the relationship between their assets and their long-term liabilities," Mr. Scott said. "The stock market crash will not change that view." ■

*Staff Reporter Trudy Ring contributed to this story.*

# LTV, PBGC dispute goes back to court

WASHINGTON — The months-long dispute between the Pension Benefit Guaranty Corp. and The LTV Corp. over responsibility for three LTV pension plans is headed back to court.

Even though the PBGC and LTV claim they are willing to negotiate a settlement, the PBGC — as expected — appealed a federal judge's ruling that the agency could not force LTV to resume responsibilities for the plans, which have liabilities of about $2 billion.

In September 1987, the PBGC restored the three terminated plans to LTV.

LTV spokesman Charles Palmer said the company will seek an expedited appeal process to move the company's bankruptcy proceedings forward. ■

# Merrill

*Continued from page 4*

board, volume growth was insignificant in every sector of the global debt and equity markets.

Total global market volume was up slightly to $368.1 billion, from $365.1 billion. First Boston/Credit Suisse, which held the No. 1 slot for the first three quarters of 1987, claimed the lead again this year. The firm was lead underwriter on $36.2 billion worth of securities, commanding 9.8% of the market. Merrill Lynch, which was in fourth place last year, moved up to second.

The U.S. debt and equity markets clearly have not recovered. Analysts attributed the sluggishness to investor and issuer wariness, helped along by rising interest rates and a lack of confidence in the future direction of interest rates. The equity markets are suffering the most.

Total taxable domestic underwriting volume for the three quarters of 1988 was $206.3 billion, down 10% from $229.2 billion for the same period last year. Equity volume also tumbled to $31.1 billion, from $55.4 billion.

Debt volume in the U.S. public markets during the three quarters picked up some, topping $175 billion, up from $173.8 billion last year.

Goldman, Sachs was No. 1 in debt offerings for the three quarters, underwriting almost $27 billion in securities and taking 15% of the market, up from $17.7 billion for the same period last year. Goldman jumped ahead of the pack; it was ranked No. 5 in the cumulative third-quarter 1987 rankings. Salomon Brothers, which was first last year, slipped to second this year, underwriting $25 billion of debt offerings, down significantly from $30.8 billion during the same period last year.

In the non-investment-grade debt market, Drexel Burnham Lambert Inc., the undisputed market leader, apparently hasn't been hurt by all the publicity surrounding the continuing insider trading scandal. Drexel was first for the first three quarters of 1988, underwriting $9.6 billion, with 50.2% of the market.

During the same period last year, Drexel also was the top-ranked underwriter, having underwritten $10.1 billion of the high-yield securities.

First Boston retained its second-place ranking all year, underwriting $2.4 billion, and claimed 12.6% of the market.

Goldman, Sachs finished first in mortgage-related securities, retaining the lead it has had all year, followed by Salomon Brothers, the traditional leader in the area. Goldman underwrote $12.9 billion of mortgage-related debt, or 17% of the market. Salomon underwrote $9.1 billion, or 12.7%, down significantly from $15.1 billion a year ago.

On the equity side, Merrill was first in initial public offerings, underwriting $3.8 billion of IPOs, up from $2.4 billion last year. The firm had a 20.2% slice of the market this year, nearly double the 11% it had captured during the same period last year.

# 1988 underwriting rankings

## (Cumulative 9 months — full credit to lead manager)

### All issues - global*

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. First Boston/CSFB** (1) | 36,217.4 | 9.8 |
| 2. Merrill Lynch (4) | 34,355.5 | 9.3 |
| 3. Goldman, Sachs (5) | 31,475.8 | 8.6 |
| 4. Salomon (2) | 29,908.2 | 8.1 |
| 5. Morgan Stanley (3) | 20,368.5 | 5.5 |
| 6. Shearson Lehman (6) | 20,347.9 | 5.5 |
| 7. Drexel Burnham (7) | 16,792.4 | 4.6 |
| 8. Nomura (8) | 15,385 | 4.2 |
| 9. Daiwa (10) | 10,167.9 | 2.8 |
| 10. Deutsche Bank (13) | 9,917.1 | 2.7 |

* All taxable issues, debt and equity, worldwide
** First Boston/Credit Suisse First Boston
Source: IDD Information Services, New York
Numbers in parentheses show the firm's 3rd qtr. 1987 ranking

### All issues - domestic*

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Merrill Lynch (3) | 29,142.3 | 14.1 |
| 2. Goldman, Sachs (5) | 28,554.7 | 13.8 |
| 3. Salomon (1) | 26,238.7 | 12.7 |
| 4. First Boston (2) | 23,921.9 | 11.6 |
| 5. Shearson Lehman (6) | 19,187.2 | 9.3 |
| 6. Morgan Stanley (4) | 17,532.6 | 8.5 |
| 7. Drexel Burnham (7) | 16,762.4 | 8.1 |
| 8. Prudential-Bache (10) | 8,093.6 | 3.9 |
| 9. Bear, Stearns (9) | 7,070 | 3.4 |
| 10. PaineWebber (14) | 5,297.2 | 2.6 |

* All taxable issues, debt and equity, sold in U.S. only
Source: IDD Information Services, New York
Numbers in parentheses show the firm's 3rd qtr. 1987 ranking

### All issues - domestic*

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Merrill Lynch (2) | 21,991.6 | 16.4 |
| 2. Salomon (4) | 17,109.4 | 12.8 |
| 3. First Boston (3) | 15,915.5 | 11.9 |
| 4. Goldman, Sachs (5) | 15,677.8 | 11.7 |
| 5. Drexel Burnham (6) | 13,018.4 | 9.7 |
| 6. Shearson Lehman (7) | 12,913.2 | 9.6 |
| 7. Morgan Stanley (1) | 11,414.4 | 8.5 |
| 8. Prudential-Bache (12) | 3,836.8 | 2.9 |
| 9. Smith Barney (9) | 3,056 | 2.3 |
| 10. PaineWebber (15) | 3,011 | 2.3 |

* All taxable issues, debt and equity, excluding mortgage-related and agency issues sold in U.S. only
Source: IDD Information Services, New York
Numbers in parentheses show the firm's 3rd qtr. 1987 ranking

### All debt issues

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Goldman, Sachs (5) | 26,987.1 | 15.4 |
| 2. Salomon (1) | 25,006.3 | 14.3 |
| 3. Merrill Lynch (3) | 23,413.4 | 13.4 |
| 4. First Boston (2) | 22,415.7 | 12.8 |
| 5. Morgan Stanley (4) | 16,306.7 | 9.3 |
| 6. Drexel Burnham (7) | 14,466.9 | 8.3 |
| 7. Shearson Lehman (6) | 14,431.8 | 8.2 |
| 8. Bear, Stearns (9) | 6,913.1 | 3.9 |
| 9. Prudential-Bache (10) | 5,778.7 | 3.3 |
| 10. Kidder, Peabody (8) | 3,964 | 2.3 |

Source: IDD Information Services, New York
Numbers in parentheses show the firm's 3rd qtr. 1987 ranking

### Non-investment grade debt

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Drexel Burnham (1) | 9,626.1 | 50.2 |
| 2. First Boston (2) | 2,408.1 | 12.6 |
| 3. Salomon (5) | 1,425.9 | 7.4 |
| 4. Morgan Stanley (3) | 1,392.3 | 7.3 |
| 5. Prudential-Bache (15) | 1,181.7 | 6.2 |
| 6. DLJ (6) | 776.3 | 4 |
| 7. Merrill Lynch (4) | 685 | 3.6 |
| 8. Smith Barney (11) | 498.1 | 2.6 |
| 9. Goldman, Sachs (7) | 385.2 | 2 |
| 10. PaineWebber (13) | 359.7 | 1.9 |

Source: IDD Information Services, New York
Numbers in parentheses show the firm's 3rd qtr. 1987 ranking

### Mortgage-related debt

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Goldman, Sachs (4) | 12,876.8 | 17.9 |
| 2. Salomon (1) | 9,129.3 | 12.7 |
| 3. First Boston (2) | 7,924.2 | 11 |
| 4. Merrill Lynch (3) | 7,090.8 | 9.9 |
| 5. Shearson Lehman (6) | 6,256.7 | 8.7 |
| 6. Morgan Stanley (5) | 6,118.2 | 8.5 |
| 7. Bear, Stearns (9) | 5,718.7 | 8 |
| 8. Prudential-Bache (10) | 4,246.8 | 5.9 |
| 9. Drexel Burnham (8) | 3,743.9 | 5.2 |
| 10. Kidder, Peabody (7) | 2,527.1 | 3.5 |

Source: IDD Information Services, New York
Numbers in parentheses show the firm's 3rd qtr. 1987 ranking

### Initial public offerings

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Merrill Lynch (2) | 3,834.3 | 20.2 |
| 2. Shearson Lehman (3) | 3,628.3 | 19.1 |
| 3. PaineWebber (9) | 2,394.6 | 12.6 |
| 4. Prudential-Bache (8) | 2,184.1 | 11.5 |
| 5. Wheat, First Securities (5) | 2,150 | 11.3 |
| 6. Alex. Brown & Sons (4) | 1,003.7 | 5.3 |
| 7. First Boston (11) | 562.8 | 3 |
| 8. Goldman, Sachs (1) | 551.6 | 2.9 |
| 9. Drexel Burnham (7) | 532.9 | 2.8 |
| 10. Salomon (6) | 392.3 | 2.1 |

Source: IDD Information Services, New York
Numbers in parentheses show the firm's 3rd qtr. 1987 ranking

### Common stock

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Merrill Lynch (1) | 4,266.3 | 18 |
| 2. Shearson Lehman (3) | 4,210.7 | 17.7 |
| 3. PaineWebber (13) | 2,461.9 | 10.4 |
| 4. Prudential-Bache (12) | 2,314.9 | 9.7 |
| 5. Wheat, First Securities (8) | 2,150 | 9 |
| 6. Drexel Burnham (4) | 1,631.7 | 6.9 |
| 7. Alex. Brown & Sons (5) | 1,118.4 | 4.7 |
| 8. Goldman, Sachs (2) | 827.6 | 3.5 |
| 9. Salomon (9) | 718.9 | 3 |
| 10. First Boston (7) | 578.2 | 2.4 |

Source: IDD Information Services, New York
Numbers in parentheses show the firm's 3rd qtr. 1987 ranking

### Preferred stock

| Firm | Volume $ mils. | Market share (%) |
|---|---|---|
| 1. Merrill Lynch (3) | 1,200 | 22.9 |
| 2. First Boston (2) | 778 | 14.8 |
| 3. Goldman, Sachs (4) | 740 | 14.1 |
| 4. Shearson Lehman (7) | 544.7 | 10.4 |
| 5. Kidder, Peabody (6) | 534 | 10.2 |
| 6. Salomon (5) | 513.5 | 9.8 |
| 7. Morgan Stanley (1) | 275 | 5.2 |
| 8. Drexel Burnham (8) | 203.9 | 3.9 |
| 9. Smith Barney (NA) | 135 | 2.6 |
| 10. DLJ (12) | 109.1 | 2.1 |

Source: IDD Information Services, New York
Numbers in parentheses show the firm's 3rd qtr. 1987 ranking

Both second-ranked Shearson Lehman and third-ranked PaineWebber seized significantly bigger shares of the IPO market in the first three quarters of this year. Shearson, which underwrote $3.6 billion, commanded 19.1% of the market; up from $2 billion and 9.4% last year. PaineWebber underwrote $2.4 billion so far this year, or 12.6%, up from $812 million, and 3.7% last year.

The volume of common stock offerings also plunged to $23.8 billion from $35.9 billion during the same period last year. Preferred stock offerings dropped by nearly 50% to $5.2 billion from $10.1 billion last year. ■

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PENSIONS &
# Investment Age
October 31, 1988
FIFTEENTH ANNIVERSARY ISSUE — $25

## THE CAPITAL MARKETS

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# HAPPY 15TH ANNIVERSARY TO A STELLAR PERFORMER...

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Investment Age

The newspaper of corporate and institutional investing

# Congress ups reversion tax

By Joel Chernoff

WASHINGTON — Caving in to pressure by Sen. Howard Metzenbaum, D-Ohio, the Treasury Department has announced a six-month freeze on issuing determination letters affecting terminations of overfunded defined benefit plans.

Congress also agreed to a permanent increase to 15% from 10% in the excise tax imposed on reversions of surplus assets to employers, but rejected a temporary 60% excise tax sought by Mr. Metzenbaum. The provision, contained in a technical corrections bill, is expected to be signed soon by President Reagan.

Photo by Tom Reed

Sen. Howard Metzenbaum succeeded in obtaining a permanent increase in the surplus asset reversion excise tax as well as a six-month freeze on determination letters.

Employers frequently seek the Internal Revenue Service's blessing in the form of determination letters on such matters as plan amendments or terminations to ensure any changes adhere to tax law.

According to sources, Mr. Metzenbaum forced Treasury officials to agree to the freeze when he blocked ratification of a tax treaty between the United States and Bermuda Oct. 22, in the waning hours of the 100th Congress. The freeze does not require legislative approval.

During the time the freeze is in effect — Oct. 24, 1988, through May 1, 1989 — the Treasury Department and Congress will pursue the issues.

"This moratorium will give Congress time to come up with legislation that will make certain workers and retirees get a fair share of those funds," Mr. Metzenbaum said in a press release. He noted employers have obtained $19 billion in surplus assets from their pension plans since 1981

The freeze includes a broad exemption for terminations

*Continued on page 88*

# Equity sales binge of plans shows no signs of abating

By Fred Williams

Private pension plans have liquidated more than $284 billion worth of stocks from 1985 through the second quarter of 1988, according to Federal Reserve Board flow of funds data.

Using annualized figures as "rough estimates," Salomon Brothers Inc., New York, estimates net equity retirements for the four years ending 1988 could reach $331 billion.

Corporate pension plans have been net sellers of common stocks every year since 1985 and equity levels are at their lowest percentage of financial assets in 25 years, according to several Wall street financial analysts.

The selling of equities by private pension funds occurred at a record rate during the first quarter of this year with net liquidations totaling $40.7 billion. The trend continued into the second quarter of 1988, with stock sales totaling $22.9 billion, according to the Fed

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Clockwise from top right: Joe Scarella, investment consultant, Wyatt Asset Services; Suresh Bhirud, chief investment strategist, Oppenheimer; Charles Clough Jr., chief investment strategist, Merrill Lynch Capital Markets.

# Ameritech blazes trail in rate swap

By Mike Clowes

CHICAGO — The $12 billion American Information Technologies Corp. pension fund has invested $100 million in a unique interest rate swap — exchanging a short-term variable-rate investment for a longer-term variable-rate indexed-based return.

The investment in the BIG Index Swap program, offered by Salomon Brothers Inc., New York, was made without assets actually changing hands, said Don Phillips, director-investment management at Ameritech.

The $100 million committed was part of the approximately $500 million Ameritech normally has in residual cash. This cash usually is invested in short-term securities.

Ameritech has contracted to pay Salomon Brothers the London interbank offered rate minus a spread, a short-term rate, on the $100 million and, in return, Salomon has contracted to pay Ameritech the total return of the Salomon Broad Investment Grade Index rate.

While neither Ameritech nor Salomon would say how much less than LIBOR Ameritech would pay, a typical spread now would be 20 basis points, said Richard Stuckey, director of hedge management at Salomon Brothers.

Each month, the difference between the rate paid by Ameritech and the rate paid by Salomon Brothers will be calculated on the $100 million. If the BIG Index total return is higher than the LIBOR rate minus the agreed upon spread, Salomon will send Ameritech the difference. If the index return is less than LIBOR minus the spread, Ameritech will send Salomon the difference. These monthly checks are the only amounts that will change hands between Ameritech and Salomon.

Because Ameritech already had $500 million in short-term investments throwing off a return similar to the LIBOR, it didn't have to make any changes in its investments to participate in the swap. It merely agreed to swap part of the returns from these short-term investments for the total return on the BIG Index.

Salomon Brothers introduced the swap as a simple way for investors to create a synthetic bond index fund that will match or beat the BIG Index return. The firm envisaged the swap as a simple and inexpensive way for pension funds to establish a core fixed-income portfolio.

At the same time, because Salomon pays the investor the total return on the BIG Index, most of the bonds of which Salomon has in inventory, the new vehicle serves as a way for the

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## LATE NEWS

### TIAA-CREF relaxing transfer rule

WASHINGTON — The Teachers Insurance and Annuity Association — College Retirement Equities Fund has agreed to broaden fund transferability for participants as a result of its requests for exemptions under the Investment Company Act of 1940 for a recently introduced money market fund.

The agreement was reached with several higher education institutions and associations, a number of mutual fund companies and the Investment Company Institute. The organizations intervened when TIAA-CREF requested exemptions from the Securities and Exchange Commission regarding transferability and limiting the voting rights of participants in the money market fund.

TIAA-CREF "agreed in principle that a CREF transfer option will be developed to permit CREF participants to transfer existing and future accumulations to alternative funding vehicles that their employers may permit and to elect to take lump-sum distribution of accumulations, again if allowed by the employer's plan," said Clifton R. Wharton Jr., chairman and chief executive officer of the $66 billion system.

Details will not be released until Nov. 21.

### Ariel sets new-cash moratorium

CHICAGO — Ariel Capital Management Inc., Chicago, has notified its 50 clients it is capping its accounts and, for an indeterminate time beginning Feb. 1, no longer will accept additional money into its separate accounts.

The notice follows by about a year a pronouncement that Ariel would not seek new clients. The decisions don't affect Ariel's mutual fund, run through the Calvert Fund.

The moratorium reflects a concern that Ariel's portfolio of primarily small-capitalization stock is getting too large, said Darice Wright, Ariel senior vice president. Ariel has about $550 million under management and expects by Feb. 1 to have about $600 million, she said. It invests in 30 stocks.

### Fed official moving to NACHA

WASHINGTON — Elliott C. McEntee, associate director of the division of federal reserve bank operations at the Federal Reserve Board, has been hired as the president and chief executive officer of the National Automated Clearinghouse Association.

Mr. McEntee, a familiar name to most corporate cash managers and bank cash management executives because of his senior level involvement in the Fed's efforts to squeeze float and eliminate risks from the payment system, will replace William R. Moroney, who will leave NACHA at the end of 1988.

Mr. McEntee has worked for the Federal Reserve Board since 1973, most recently managing the Fed's oversight of the domestic payment mechanism and the financial services that Federal Reserve Banks offer U.S. financial institutions.

### Fixed-income manager moves

LONDON — Christopher Wyke, formerly an international fixed-income manager at N.M. Rothschild International Asset Management, London, has joined Bankers Trust Investment Management Ltd., London, as a director and head of fixed income.

Mr. Wyke spent seven years with Rothschild, which lost seven investment professionals about a year ago (*Pensions & Investment Age*, Sept. 7, 1987). From 1984 to 1987, Mr. Wyke managed Rothschild's New York office with responsibility for working with pension plans and captive insurance companies.

Rothschild replaced Mr. Wyke internally, although the replacement's name could not be learned by press time.

### Stormont-Vail switches advisers

TOPEKA, Kan. — Stormont-Vail Health Services Corp. hired Dean Investment Associates, Dayton, Ohio, as balanced manager for its entire $13 million pension fund and $3 million in general operating funds, said Vernon Long, vice president.

Dean replaces Reimer and Koger Associates Inc., Shawnee Mission, Kan., which also ran a balanced account, according to Mr. Long.

Shearson Lehman Hutton Inc., Kansas City, Mo., was the consultant in the move.

# Derivative plays lure bond assets

By Trudy Ring

Fixed-income managers that use futures and options are seeing a boom in business — picking up almost $2 billion this year alone — in marked contrast to the post-crash market for equity derivative strategies.

Among the managers seeing a spurt in business during 1988 are Lotsoff Capital Management, Chicago, whose assets under management have doubled to $800 million; Pacific Investment Management Co., Newport Beach, Calif., whose assets have grown by about $1 billion to $17.5 billion; Ward & Wissner Capital Management Inc., New York, whose assets have grown to about $800 million from $577 million; and Security Capital Management Inc., Stamford, Conn., whose assets have grown to $850 million from $561 million.

For all but Lotsoff Capital, the assets are largely tax exempt; for Lotsoff, about half the total is tax exempt, with the remainder from corporate cash and insurance company clients.

The increases came from new clients and increased commitments from existing clients.

The $220 million Equifax Inc. defined benefit plan, Atlanta, increased its allocation to Lotsoff Capital by "a significant amount" this year, said Roger Dailey, vice president. He would not give the exact figures.

Lotsoff Capital has been a manager for Equifax for several years, Mr. Dailey said. "They've basically done a good job for us, they're flexible and they're pretty innovative," he said.

Lotsoff Capital's assignment for the fund includes short-, intermediate- and long-duration strategies, with options used for downside protection.

The Madison, Wis.-based Credit Union National Association's $110 million money purchase plan increased its account with Ward & Wissner by about $8 million, to roughly $20 million this year. Ward & Wissner is one of five managers for the plan's fixed-income fund.

After participants direct their contributions to a certain fund, trustees decide which manager within the fund will receive the dollars, said Jim Cox, investment consultant for Credit Union Benefit Services Inc., the affiliate that

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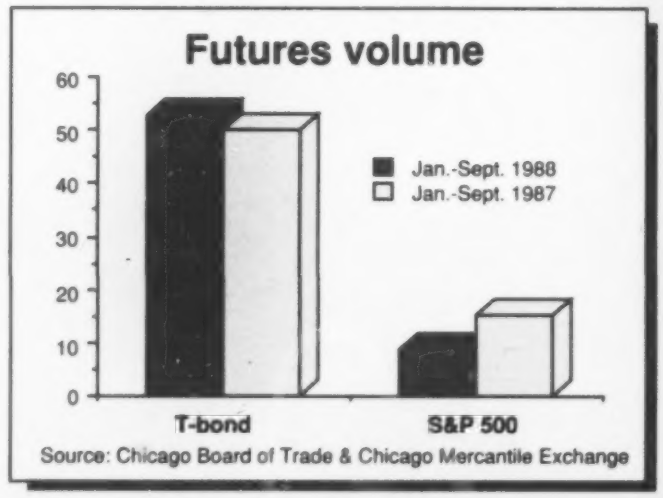


# Searches up slightly

## Fund allocation reviews spark activity

By Carol Wiley

Pension funds are searching for managers at only a slightly higher rate this year than during the pre-crash months of 1987, with most manager changes being precipitated by post-crash scrutiny of asset allocations rather than dissatisfaction with performance.

Pension funds also are using consultants slightly more often than last year in their searches, according to one firm's data.

A total of 612 managers searches have been conducted between Jan. 1 and Sept. 30, according to Eager Associates, Louisville, Ky. Of the total, 370 used consultants, 145 didn't or wouldn't indicate consultant use and 97 were conducted in-house. The searches resulted in 250 hirings.

During the same period in 1987, 551 manager searches were conducted. Of those, 313 made use of consultants, 69 searches didn't or wouldn't indicate consultant use and 169 searches were conducted internally. The searches resulted in 249 hirings.

For the first nine months of 1988, 56 consulting firms were used; in 1987, 48 firms were used.

Fewer searches this year were for defined benefit plans, according to Caroline Cummings Eager, partner in the consulting firm. In the first nine months of 1988, 36% of the searches were for defined benefit plans; in the same period in 1987, 40% were for defined benefit plans.

"We see pension funds hiring fewer specialists and moving to consolidate the number of managers," Ms. Eager said.

The number of searches for public funds increased, however. A total of 35% of the searches from January to Sept. 30 were for public funds; 30% of the searches in the same period last year were for public funds, Ms. Eager said.

In a spot check of 10 investment management consultants, many said most of the manager searches they've conducted this year were the result of analysis of the fund's asset allocation.

One gave Financial Accounting Standards Board regulations as a reason pension funds have been

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Cover photo by Image Bank
Cover design by Anthony Ficke

Vol. 16, No.23 — Pensions & Investment Age (ISSN 0273-5466) is published biweekly with a special edition in May, at 740 Rush St., Chicago, Ill. 60611. Second class postage paid at Chicago, Ill. and at additional mailing offices. Postmaster: Send address changes to Pensions & Investment Age, Circulation Dept. 965 E. Jefferson, Detroit, Mich. 48207. © 1988

# Investing for the future

## 3 traditional factors determine investment results

By Robert D. Milne

The success of any long-term investment program will depend upon the major forces that will be at work through 2003.

Investment returns in the future will be dependent upon the same three major forces that have governed since the dawn of investing: the supply and demand for capital; the economic and political environments; and the ability of corporate America to cope with these environments.

**Supply/demand for capital**

Looking first at demand, in 1960 the debt load increased at a 6% annual rate. The appetite for borrowing, however, has grown until it has reached levels above 10% in the 1980s.

The reasons for this increase are many, but they boil down to three major categories: the federal budget has gotten out of control; business has gone on a borrowing binge; and the consumer has been lulled into ever-increasing debt in all categories.

Are these factors likely to change greatly? Probably not. In each instance, the fundamental reasons are mostly psychological and are ingrained. Obviously, there are some limits to borrowing and the annual percentage change in debt can't go on increasing forever. In fact, total debt in this country is now more than 170% of gross national product, a higher debt load than in 1929.

In the history of most nations, however, the trend toward greater borrowing rarely has been reversed.

Looking at the supply side, for the first half of the past 25 years, the personal saving rate was about equal to the increase in the debt load. The trend during the past decade has been disappointing, with the personal saving rate falling to near 4%. If it weren't for pension funds — where the annual contribution is considered as personal saving by the employees — the saving rate picture would be even more dismal.

However, this ignores saving by corporate America in the form of retained earnings — as well as other factors.

The demand for credit has been high and increasing, while the supply of saving has been inadequate. Thus it is not really so surprising the return on U.S. Treasury bills during the past 10 years has been 9.2%, compared with a 3% rate during the preceding 50 years.

Perhaps there is some hope from Washington. Finally, there is some understanding that deficit financing can be overdone as evidenced by the Gramm-Rudman-Hollings Act. However, the federal deficit is running at double the initial Gramm-Rudman-Hollings targets. The commitment to the act isn't especially strong.

Before leaving the topic of supply/demand relationships the obvious must be noted — the demand for credit is supplied in some way. Japan and Europe have been financing almost half the federal deficit.

The Japanese, however, have a financial problem that is about the opposite of ours. They have a personal saving rate around 20%, far higher than is needed for their economy. Naturally this excess supply of savings results in a low price for the Japanese investor — with very low interest rates on Japanese bonds and almost unbelievable price-earnings ratios for stocks. The investor doesn't get treated very well when savings are high.

This excessive savings isn't a near-term problem in this country.

**Economic/political climate**

National income statistics were first compiled in the 1920s, and at the time corporate profits plus interest earned by all corporations amounted to 6% or 7% of GNP. After the worst of the Depression was over, corporate profits rebounded to the same level.

Despite the many challenges corporate America has faced, profits have held up well.

None of us knows what problems will come in the years ahead, but in the past, business has coped with myriad problems and still earned a reasonable share of the nation's output.

Inflation is no longer a problem now that it has slowed to the 4% level during the past five years, with a dip to even lower levels during the collapse in oil prices. In fact, the problem of inflation has been solved twice during the last decade and six times since World War II.

History shows the value of the dollar moves in only one direction — the only difference being that sometimes the drop is sharp and sometimes it is more moderate. Today, the Federal Reserve and other central banks debase currency in an efficient way.

C. Northcote Parkinson, famed for Parkinson's Law that "work expands to fit the time available," has said "Democracy equals inflation."

If debt in the United States is growing at nearly a 10% annual rate while the economy grows over a full economic cycle about 3%, one might infer the pressures for inflation in this country are for a 7% rate. This is no doubt some overstatement of the fundamental inflation rate in this country, but I believe the relatively low inflation rates of today are unlikely to persist. We are at a cyclical low point and are ready for the next cyclical upswing in inflation.

One of the most important elements of the economic environment is the monetary environment.

When money is tight, the price of money rises. The price of money is the interest rate. Interest rates on U.S. Treasury 91-day bills follow velocity almost immediately, with long-term interest rates following.

Although cyclical swings in Federal Reserve monetary policy are the main force leading the bond market, in the longer term the Fed is likely to provide an adequate amount of money supply to provide for economic activity.

During the last 25 years, the return on equities has averaged about 12%. There is some evidence of an upward drift in returns through 1980 in keeping with the supply/demand relationship for capital discussed earlier.

The acceleration of depreciation that occurred with the first Reagan tax cuts reduced reported earnings and, therefore, the reported return on equity. In any event, earnings reported on corporate tax returns are not likely to be overstated.

In trying to evaluate the prospects for returns on stocks, we know bull markets and bear markets make major actual earnings progress because of the changed supply/demand relationships as long-term interest rates more than doubled from 4.25% in 1960 to exceed the 10% mark in the 1980s.

Had it not been for this major change in interest rates, which affected the market prices for stocks and bonds, it is likely returns on stocks would have approximated the return on equity of the underlying corporations. Incidentally, the S&P 500 is used as the measure of corporate America because it includes more than 80% of the value of all stocks on the New York Stock Exchange.

**Summary**

The accompanying table indicates the forecasts for the year 2000.

I begin with an estimate that inflation will average 6% during the next 15 years. This is somewhat less than in the past decade and more in line with the record of the 25 years during which inflation proceeded at a 5.5% rate.

Forecasting inflation rates is really attempting to forecast the integrity of our friends in Washington. The winds of inflation will blow hot and cold, with some periods of help from oil-price wars and other periods when outside shocks exacerbate inflation.

The major force at work in a longer period is the need to monetize the national debt once the cost of servicing the debt becomes too burdensome. Interest on the national debt is running at more than $140 billion a year. If the value of the dollar were halved, the effective cost of paying the interest would also drop in half.

Although the process of monetizing the national debt doesn't proceed on a steady pace, in the longer term the national debt has been monetized in virtually every nation. On Sept. 22, 1985, the United States devalued the dollar on the international scene when the trade deficit reached intolerable levels. We will similarly be forced to devalue domestically unless the federal budget can be brought under control.

The forecasts of nominal real returns for 91-day T-bills and relatively small real returns for longer-term bonds follow from experience. I do have a greater sense of uncertainty about these forecasts because the supply/demand relationship for capital might well provide better returns for the long-term investor.

The stock market is likely to earn a rate of return equal to the return on shareholders' equity. The long-term record of the returns to corporate America holding constant as a share of GNP is a strong reason for believing investors in equities will continue to share fully in the longer term growth of America.

The conclusion is that investing in bonds is a vote of confidence in the integrity of our representatives in Washington, while investing in stocks is a vote of confidence in the ability of corporate America to continue to earn a reasonably constant share in the future growth of our economy.

Long-term investors have to make their decision to trust one group or the other; standing pat in U.S. Treasury bills will not get them anywhere. ■

*Mr. Milne is president and chief executive officer of Duff & Phelps Investment Management Co., Cleveland.*

**Robert Milne says investment performance will be determined by three traditional forces.**

**The past, the future**

| | 1960-1987 | 1938-'87 | 1962-'87 | 1979-'87 | 1987-2000 |
|---|---|---|---|---|---|
| Inflation | 2.2% | 3.2% | 5.5% | 6.4% | 6% |
| Treasury bills | NA | 3.5 | 6.7 | 9.2 | 6 |
| Long corp. bonds | 4.8 | 4.9 | 6.3 | 9.7 | 8 |
| S&P 500 | 9 | 9.5 | 9.9 | 15.3 | 12 |

# No slowdown

*Continued from page 4*

"you can't trust those other guys' numbers. They don't have the standards we have. They're lying." Now there is a vast improvement in accounting standards worldwide.

Fifteen years from now there certainly will be more sophisticated and much deeper markets in terms of hedging abilities. Today, long-dated swaps and long-dated hedges on currencies are very difficult to come by. I am sure that down the road you will be able to do a 15-year currency swap or 15-year hedge as easily as you can do a three-month one today. The markets will be that deep because we will be so much more globalized.

Again, globalization will be more a debt globalization than an equity globalization, so your equity play will be in a different form.

Perhaps de-equitization is happening because the U.S. corporations were somewhat bloated. Living closer to the edge makes people more concerned about their costs. That is a particular problem here, but also in many other countries.

The changes in financing will alter the way investment bankers serve companies. Already, investment bankers are dealing with corporations less on the equity side than on the debt side. Equities, both on the sales side and the trading side, will play a much lesser role in investment banking firms than they have.

Debt new-product development efforts will increase. When you get a truly global market with much more sophisticated hedging products, you certainly have to believe innovation is going to blossom. If you had long-dated swaps, long-dated hedges — currency and interest rates — available in a true global market, there would be a lot more sexy things you could be doing.

The barriers to true globalization are differences in the markets, differences in regulation and differences in trading policies that might trigger disputes between countries that would close down foreign entry or investment.

There also will be changes in the roles of commercial banks. The thin-margined lending business cannot continue. Banks are not going to put billions of dollars at risk for 10 basis points. Whether the fee business will increase I don't know, but the banks will move to more of a bigger margined longer-term lender.

Undoubtedly the U.S. banks will consolidate the way the Japanese have: we will have fewer, but larger, banks.

Under the de-equitization scenario, leasing may blossom. If you believe de-equitization is going to happen, there probably are going to be people still wanting quasi-equity plays, and maybe holding an asset like an airplane is equivalent to an equity play.

That is, those who used to play equities may now play equipment leases as a form of equity.

De-equitization may also argue strongly for real estate. If the equity markets diminish in size, perhaps this lack of availability of stocks will prompt increased use of real estate by investors.

Shorter term, what we are all waiting to see is the impact a major business downturn will have on what we have done in the past five years to the capital structures and the capital markets. That is the global event that will tell us what will happen in the future. This whole thing we have been through could just be the greater-fool theory.

The only thing that will stop this worldwide move to debt is if we come out of the next downturn and all of those companies that have leveraged themselves up have gone bankrupt. ■

*Mr. Pope is executive vice president and chief financial officer of UAL Inc., Chicago. This article was written with Mike Clowes.*

# First Interstate lands 5 funds

LOS ANGELES — First Interstate Bank Ltd.'s trust and investment division has picked up five clients representing approximately $3.2 billion worth of assets.

The five new clients, all of whom hired First Interstate to replace Bank of America as their master trustee, are: The Southern California United Food and Commercial Workers Union and Food Employees, Cypress, Calif., $1.7 billion; Consolidated Freightways Inc., Menlo Park, Calif., $150 million; The Laborers Pension Trust Fund for Northern California, San Francisco, $500 million; The Operating Engineers, Local 3, Northern California, San Francisco, for $800 million of its $1.1 billion in assets; and Advanced Micro Devices Inc., Sunnyvale, Calif., $50 million. ■